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===== SPECIAL ARTICLES =====

Influenza Prevalence and Mortality in the United States
The Weil-Felix Reaction in Rocky Mountain Spotted Fever
Summary of the Notifiable Diseases in the United States,
1927



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HUGH S. CUMMING, *Surgeon General*

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The PUBLIC HEALTH REPORTS are issued weekly by the United States Public Health Service through its Division of Sanitary Reports and Statistics, pursuant to acts of Congress approved February 15, 1893, and August 14, 1912.

They contain: (1) Current information of the prevalence and geographic distribution of preventable diseases in the United States in so far as data are obtainable, and of cholera, plague, smallpox, typhus fever, yellow fever, and other communicable diseases throughout the world. (2) Articles relating to the cause, prevention, or control of disease. (3) Other pertinent information regarding sanitation and the conservation of public health.

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NO. 4

INFLUENZA PREVALENCE IN THE UNITED STATES

A comparison of reports of the cases of influenza for the weeks ended January 5 and January 12, 1929, indicates that the number of cases is decreasing in all parts of the country except in the West South Central States, in the northerly portion of the South Atlantic States, and in the Northeast.

The peak of the epidemic appears to have been passed in the Pacific States during the week ended December 8, 1928; in the Mountain and West North Central States, December 15; in the East North Central States, December 29; in the East South Central States and the South Atlantic States during the week ended January 5, 1929. The West South Central, Middle Atlantic, and New England States had not reported any decline in the number of cases to January 12, 1929.

The following table shows the total numbers of cases reported in each State from October 14, 1928, to January 12, 1929, inclusive. States from which no reports were received are omitted from the table.

New England:		Cases	South Atlantic—Continued		Cases
Maine.....		1,519	West Virginia.....		30,181
New Hampshire.....		188	South Carolina.....		46,205
Vermont.....		664	Georgia.....		38,888
Massachusetts.....		3,128	Florida.....		2,721
Rhode Island.....		432	East South Central:		
Connecticut.....		3,266	Kentucky.....		40,036
Middle Atlantic:			Tennessee.....		48,498
New York City.....		4,317	Alabama.....		48,060
New Jersey.....		5,331	Mississippi.....		50,735
East North Central:			West South Central:		
Ohio.....		19,463	Arkansas.....		14,513
Indiana.....		9,729	Louisiana.....		12,071
Illinois.....		10,969	Oklahoma.....		31,650
Michigan.....		29,087	Texas.....		14,147
Wisconsin.....		31,947	Mountain:		
West North Central:			Montana.....		17,465
Minnesota.....		4,696	Idaho.....		191
Iowa.....		113,550	Wyoming.....		1,350
Missouri.....		39,063	Colorado.....		6,267
North Dakota.....		33,634	New Mexico.....		6,578
South Dakota.....		832	Arizona.....		4,584
Nebraska.....		7,000	Utah.....		871
Kansas.....		117,642	Pacific:		
South Atlantic:			Washington.....		3,106
Delaware.....		418	Oregon.....		6,821
Maryland.....		11,255	California.....		45,604
District of Columbia.....		1,746	Total.....		164,927
Virginia.....		40,000			

¹ Includes 112,000 cases estimated, covering 2 weeks. Owing to the incomplete reporting of cases, estimates can not be fairly compared with reports of cases notified.

² Estimate, for 1 week only.

25500*—29—1

(175)

MORTALITY OF THE CURRENT INFLUENZA EPIDEMIC¹

In last week's PUBLIC HEALTH REPORTS, data were presented in tabular form on the mortality of the present influenza outbreak in a group of cities classified according to the geographic divisions of the United States. The mortality data were presented in the form of the excess annual death rates from influenza and pneumonia per 100,000 population, the rates being given by weeks for the period from the first week of November, when the outbreak first manifested itself in an increased mortality on the Pacific Coast, to the week ended January 5, 1929.

Considering all cities together, the excess annual rate for the week ended January 12 was 426, as against 392 for the preceding week. This increase is much less than the increase that occurred in the preceding week and suggests that for the country as a whole the mortality is nearing the peak of the epidemic. It should be noted, however, that, considered in terms of the excess of influenza and pneumonia deaths over the normal seasonal expectancy, the mortality of these cities (about 60) of the United States had not on January 12 begun to decline.

In Figure 1 the excess influenza and pneumonia death rates are shown graphically up to the week ended January 12, 1929.

Up to January 12, the highest mortality for any single week occurred in the cities of the East South Central section, which cities showed an annual excess rate of 1,628 for the week ended January 12. The cities of the Mountain region showed the next highest rate, an excess annual rate of 1,148 per 100,000 for the week ended December 15. By January 12 the excess rate in this region had declined to 126, or almost back to the normal rate. The rate in the Pacific Coast cities is likewise about back to normal. The highest excess annual rate in the Pacific division was 458, experienced in the week ended December 8, less than half of the highest rate in the Mountain cities and less than a third of the rate in the East South Central cities.

In the West South Central cities the maximum excess annual mortality rate thus far experienced in the present outbreak was 821 per 100,000 during the week ended January 12. This rate is only slightly above the rate for the preceding week, suggesting that the mortality in this section has about reached its peak.

In the West North Central and the East North Central cities, the peak of influenza and pneumonia mortality has apparently been reached during the weeks ended December 29 and January 5, respectively. The excess rate in the peak week was less in the West North Central cities than in any division which had, up to January 12, definitely passed the peak. The rate in the peak week in the East

¹ From the Office of Statistical Investigations, United States Public Health Service.

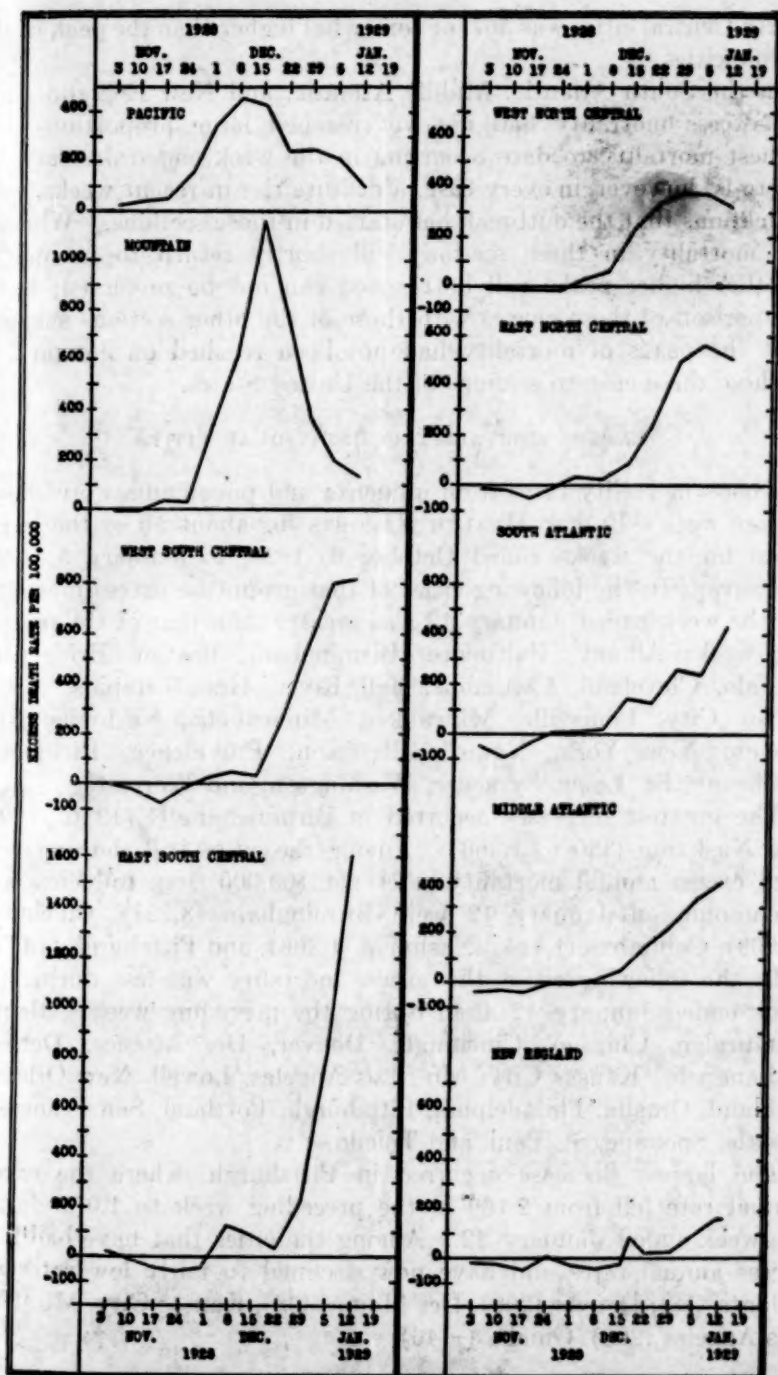


FIG. 1.—Excess mortality from influenza and pneumonia per 100,000 population in cities of various geographic sections of the United States. (Excess over mean of rates in three to four non-epidemic years.)

North Central cities was 567, or somewhat higher than the peak of the Pacific cities.

In the South Atlantic, Middle Atlantic, and New England cities the excess mortality had not yet reached large proportions, the highest mortality to date occurring in the week ended January 12. There is, however, in every case, a definite rise in recent weeks, with indications that the outbreak has started in those sections. Whether the mortality in these sections will shortly return to normal or whether higher peaks will be reached can not be predicted; but a comparison of these curves with those of the other sections suggests that the peaks of mortality had not been reached on January 12 in these three eastern sections of the United States.

EXCESS MORTALITY IN INDIVIDUAL CITIES

Excess mortality rates from influenza and pneumonia were shown in last week's PUBLIC HEALTH REPORTS for about 50 of the larger cities for the weeks ended October 6, 1928, to January 5, 1929, inclusive. In the following cities of that group the excess mortality for the week ended January 12 was greater than that of the preceding week: Albany, Baltimore, Birmingham, Boston, Bridgeport, Buffalo, Cleveland, Columbus, Fall River, Grand Rapids, Mich., Jersey City, Louisville, Milwaukee, Minneapolis, Nashville, New Haven, New York, Newark, Paterson, Providence, Richmond, Rochester, St. Louis, Syracuse, Washington, and Worcester.

The greatest increases occurred in Birmingham (1,712 to 3,227) and Nashville (330 to 1,366). Among the cities still showing very high excess annual mortality rates per 100,000 from influenza and pneumonia on January 12 were Birmingham (3,227), Cincinnati (1,009), Columbus (1,114), Nashville (1,366), and Pittsburgh (1,071).

In the following cities the excess mortality was less during the week ended January 12 than during the preceding week: Atlanta, Cambridge, Chicago, Cincinnati, Denver, Des Moines, Detroit, Indianapolis, Kansas City, Mo., Los Angeles, Lowell, New Orleans, Oakland, Omaha, Philadelphia, Pittsburgh, Portland, San Francisco, Seattle, Spokane, St. Paul, and Toledo.

The largest decrease occurred in Pittsburgh, where the excess annual rate fell from 2,169 in the preceding week to 1,071 during the week ended January 12. Among the cities that have had high excess annual rates and have now declined to fairly low rates are Atlanta (18), Denver (209), Des Moines (93), Kansas City, Mo. (88), Los Angeles (208), Omaha (-46).

ROCKY MOUNTAIN SPOTTED FEVER

A Preliminary Report on the Weil-Felix Reaction

By A. L. KERLEE,¹ *Bacteriologist, United States Public Health Service*, and R. R. SPENCER, *Surgeon, United States Public Health Service*

Kelly² tested the sera from nine cases of Rocky Mountain spotted fever occurring in California, using as antigens a fresh agar culture and a formalized suspension of a strain of *B. proteus* X₁₉ obtained from the Hygienic Laboratory at Washington. Eight of these sera did not agglutinate the organism. The serum of one patient, however, taken during the third or fourth week of the disease gave a positive agglutination in a dilution of 1:400 when "the first 24-hour transplant from a stock culture" was employed as antigen. The same specimen of serum gave negative results two days later against "a 24-hour agar culture, a 24-hour glucose agar culture, and a formalized antigen."

So far as we are aware Kelly was the first to perform the Weil-Felix reaction with Rocky Mountain spotted fever sera; and while he recognized his series of tests were not large, he felt that his results suggested "that the Weil-Felix reaction is negative in Rocky Mountain spotted fever and may be of value in differentiating between this disease and typhus fever."

Kelly's observations seemed to support the view held by many regarding the agglutination of *B. proteus* X₁₉ in typhus sera, namely, that the reaction was a specific one for typhus fever.

The tests recorded herewith show that strains of *B. proteus* X₁₉ are agglutinated by the sera of experimental animals and patients suffering from Rocky Mountain spotted fever.

Altogether three strains of *B. proteus* X₁₉ were used. The Hygienic Laboratory strain No. 271 has been fully tested for sensitivity against the endemic typhus occurring in the southern United States by Maxcy and has been used extensively for diagnostic purposes. The other two strains used were the Kingsbury strain and the Warsaw strain both obtained from Fletcher³ of Kuala Lumpur, Federated Malay States. Strain No. 271 and the Warsaw strain are indologenic, while the Kingsbury strain does not produce indol.

Concentrated antigens were prepared with 0.1 per cent formalin, so that when diluted for use to a turbidity comparable to 500 parts per million of a silica standard the concentration of formalin would be negligible and interference with the reaction reduced to a minimum.

¹ A. Leroy Kerlee died February 14, 1928, from Rocky Mountain spotted fever contracted in line of duty at the field laboratory of the U. S. Public Health Service located at Hamilton, Mont.

² Kelly, F. L.: Weil-Felix Reaction in Rocky Mountain Spotted Fever. *Jour. Inf. Dis.*, vol. 32, No. 3, March, 1923, pp. 223-225.

³ Fletcher, W., and Lesslar, J. E.: Tropical Typhus in the Federated Malay States. *Bull. No. 2 of 1925*, Institute for Medical Research, Kuala Lumpur, Federated Malay States.

TEST I (GUINEA PIGS)

A series of 12 guinea pigs were inoculated intraperitoneally with Rocky Mountain spotted fever blood virus on September 15, 1927. Beginning on the first day on which any of the animals showed an elevation of temperature (September 19), and each day thereafter until the fourteenth day after inoculation, about 1 cubic centimeter of blood was drawn from all surviving guinea pigs by heart puncture with a very small needle. Blood was also taken on the nineteenth, the twenty-fourth, and the twenty-ninth days after inoculation. Only four animals lived through the entire course. At no time was a positive test recorded for any of these animals, although all of them developed typical lesions of Rocky Mountain spotted fever. All sera were tested against the Hygienic Laboratory strain No. 271 (the same as that used by Kelly) and the Kingsbury strain of *B. proteus* X₁₉.

TEST II (RABBITS)

A series of seven rabbits were inoculated intraperitoneally with 1 cubic centimeter of blood virus. Four days later blood was drawn from the ear vein of each, as well as on each succeeding day until the ninth, at which time the temperature of all rabbits had again become normal. Blood was also taken on the fourteenth, nineteenth, and twenty-fourth days after onset.

These sera were tested against two antigens; namely, one prepared from the Kingsbury strain and one from the Warsaw strain. For this reason the rabbit and the guinea pig tests are not entirely comparable.

TABLE 1.—Results of tests on three rabbits

Day after onset of dis- ease	Antigen	Rabbit No. 3033 (dilution)							Rabbit No. 3034 (dilution)							Rabbit No. 3035 (dilution)									
		20	40	80	160	320	640	1,280	2,560	20	40	80	160	320	640	1,280	2,560	20	40	80	160	320	640	1,280	2,560
1	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	K	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	K	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	K	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	K	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	W	-	-	-	-	-	-	-	-	tr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	K	+	+	+	-	-	-	-	-	tr	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	K	+	+	+	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	W	-	-	-	-	-	-	-	-	+	+	+	-	-	-	-	-	+	+	-	-	-	-	-	-
	K	+	+	+	tr	-	-	-	-	+	+	+	-	-	-	-	-	+	+	-	-	-	-	-	-
8	W	-	-	-	-	-	-	-	-	+	+	+	-	-	-	-	-	+	+	-	-	-	-	-	-
	K	+	+	+	-	-	-	-	-	+	+	+	-	-	-	-	-	+	+	-	-	-	-	-	-
9	W	-	-	-	-	-	-	-	-	+	+	+	-	-	-	-	-	+	+	+	+	-	-	-	-
	K	+	+	+	-	-	-	-	-	+	+	+	-	-	-	-	-	+	+	+	+	-	-	-	-
14	W	-	-	-	-	-	-	-	-	+	+	+	-	-	-	-	-	+	+	+	+	-	-	-	-
	K	+	+	+	-	-	-	-	-	+	+	+	-	-	-	-	-	+	+	+	+	-	-	-	-
19	W	-	-	-	-	-	-	-	-	+	+	+	-	-	-	-	-	+	+	+	+	-	-	-	-
	K	+	+	+	-	-	-	-	-	+	+	+	-	-	-	-	-	+	+	+	+	-	-	-	-
24	W	-	-	-	-	-	-	-	-	+	+	+	-	-	-	-	-	+	+	+	+	-	-	-	-
	K	+	+	+	-	-	-	-	-	+	+	+	-	-	-	-	-	+	+	+	+	-	-	-	-

Symbols: K=Kingsbury antigen; W=Warsaw antigen; +=Complete agglutination; +=Partial agglutination; tr=Trace.

Table 1 records the tests carried out on three of the seven rabbits selected at random and shows a definite increase in agglutinins in these rabbits, reaching a maximum on the ninth day. The other rabbits, which are not recorded, also showed an increase in titer of their sera in about the same degree. The period of incubation of the disease in rabbits was about four to five days, so that the maximum titers actually occurred about two weeks after inoculation, which is about the same as observed in typhus fever. Sera from control rabbits never gave a positive test at any time.

TEST III (HUMAN)

As human controls, the sera from 43 university students who had never had spotted fever or typhus fever were tested for agglutination titer against the Kingsbury and the Hygienic Laboratory strains of *B. proteus* X₁₉. None of these sera gave a positive result. This test was made before we obtained the Warsaw strain.

Table 2 gives the results of tests on eight sera from spotted-fever patients against the Hygienic Laboratory strain of *B. proteus* X₁₉. Four were also tested against the Kingsbury antigen.

TABLE 2.—Results of tests on eight sera from spotted-fever patients

No.	Patient data	Anti-gen	Dilution						
			20	40	80	160	320	640	1,280 2,560
1	J. P.: First week of convalescence.....	H. L.	#	#	#	#	#	—	—
2	E. T. S.: Eighteenth day after onset—early convalescence.....	H. L.	#	#	#	#	#	#	#
3	D. H.: Eleventh day of illness.....	H. L.	#	#	#	#	#	#	#
4	J. W.: Fifteenth day of illness.....	H. L.	#	#	#	#	#	#	—
5	A. M. C.: Spotted fever in August, 1926. Blood taken Sept. 20, 1927.....	H. L.	—	—	—	—	—	—	—
6	M. I. N.: Spotted fever in August, 1926. Blood taken Sept. 20, 1927.....	K	+	+	+	—	—	—	—
7	L. McN.: Spotted fever in April, 1927. Blood taken Sept. 20, 1927.....	H. L.	#	#	#	#	#	+	—
	J. T. B.: Blood taken seventh day of illness.....	K	—	—	—	—	—	—	—
	Blood taken fourteenth day of illness during early convalescence.....	H. L.	+	+	+	+	+	—	—
8	Blood taken 2 months and 7 days after onset.....	K	—	—	—	—	—	—	—
		H. L.	#	#	#	#	#	+	—
		K	+	+	+	—	—	—	—
		H. L.	#	#	#	+	+	—	—
		K	—	—	—	—	—	—	—

Symbols: H. L.—Hygienic Laboratory antigen; K—Kingsbury antigen; #—Complete agglutination; +—Partial agglutination.

DISCUSSION

It will be noted that the serum from patient No. 8 (Table 2) was tested on the seventh and fourteenth days after onset and again after complete recovery. This serum showed an increase in titer from the seventh to the fourteenth day. Sera Nos. 5 and 6 showed the presence of agglutinins more than a year after onset of illness, which suggests that agglutinins persist longer in the sera of spotted-fever patients than has been commonly observed in typhus fever.

Our results with the sera of Rocky Mountain spotted fever infected animals coincide with those obtained by others in the study of experimental typhus in that rabbits produce agglutinins for *B. proteus* X₁₉ and guinea pigs do not.

In view of the clinical similarity of typhus fever and Rocky Mountain spotted fever, and the high titers obtained in our tests, we believe the finding of a positive agglutination in Rocky Mountain spotted fever is not accidental. While Kelly obtained a single positive test which could not be repeated, our tables show that the agglutinin content of the sera of both rabbits and man increases as the disease progresses and then decreases during convalescence. Such a result is strong additional evidence of relationship between the disease process and the agglutinin reaction.

SUMMARY

1. The sera from guinea pigs inoculated with Rocky Mountain spotted fever virus did not agglutinate two strains of *B. proteus* X₁₉.

2. Sera from rabbits similarly inoculated with spotted fever virus showed a definite increase in agglutinin content reaching a maximum titer on the ninth day after onset of symptoms, or the fourteenth day after inoculation.

3. The sera of human patients taken during the course of the disease and during convalescence showed the presence of agglutinins for two strains of *B. proteus* X₁₉.

THE NOTIFIABLE DISEASES IN STATES DURING 1927

Summary

The summary, published herewith, of the reported prevalence of communicable diseases in States during 1927 is taken from Supplement No. 73, which will soon be issued by the Public Health Service. The rates have been compiled from data furnished by the health officers of the several States, the District of Columbia, and the insular possessions. The following list of diseases is included in the supplement:

Anthrax in man.

Chicken pox.

Cholera.

Dengue.

Diphtheria.

Gonorrhea.

Influenza.

Lethargic encephalitis.

Malaria.

Measles.

Meningococcus meningitis.

Mumps.

Pellagra.

Plague (human).

Pneumonia (all forms).

Poliomyelitis.

Rabies in animals.

Rabies in man.

Rocky Mountain spotted fever.

Scarlet fever.

Septic sore throat.	Typhoid fever.
Smallpox.	Typhus fever.
Syphilis.	Undulant fever.
Tuberculosis (all forms and respiratory system).	Whooping cough.
Tularæmia.	Yellow fever.

For most of the diseases four tables are given: (1) Estimated expectancy, (2) morbidity, (3) mortality, and (4) morbidity, mortality, and case fatality rates.

The estimated expectancy represents an attempt to ascertain from the experience of recent years how many cases of the disease under consideration might have been expected in 1927.

In comparing the figures for 1927 with the estimated expectancy, or with reports for preceding years, it should be borne in mind that there has been a gradual improvement in the reporting of communicable diseases during the last few years. An increase in the number of cases reported may be due to better reporting of the particular disease rather than to an increase in the number of cases occurring.

In some instances comparatively large numbers of cases of diseases reported in certain States may be due to the system of reporting rather than to unusual prevalence of the diseases. For instance, in Mississippi physicians report some diseases monthly to the State health officer, giving the number of cases occurring in their practice during the month.

Similar tabulations of reported cases and deaths from communicable diseases, have been issued by the United States Public Health Service for the years 1912 to 1926, inclusive.

As long as the supply lasts, copies of this supplement may be had free, on request, by subscribers of Public Health Reports and others desiring them. Address The Surgeon General, United States Public Health Service, Washington, D. C.

SUMMARY OF NOTIFIABLE DISEASES IN STATES, 1927

CHICKEN POX

47 States: ¹	
Cases reported, 1927 (population 118,105,000).....	217, 316
Estimated expectancy, based on years 1922-1926.....	166, 453
Cases per 1,000 inhabitants, 1927.....	1. 84
Cases per 1,000 inhabitants, estimated expectancy.....	1. 47
44 States: ¹	
Deaths registered, 1927 (population 112,751,000).....	151
Deaths per 1,000 inhabitants, 1927.....	0. 001
Cases reported for each death registered, 1927.....	1, 382. 65

¹ The District of Columbia is also included.

DIPHTHERIA

47 States:¹

Cases reported, 1927 (population 118,105,000).....	106, 191
Estimated expectancy, based on years 1920-1926.....	134, 777
Cases per 1,000 inhabitants, 1927.....	0. 90
Cases per 1,000 inhabitants, estimated expectancy.....	1. 21

45 States:¹

Deaths registered, 1927 (population 114,542,000).....	8, 683
Deaths per 1,000 inhabitants, 1927.....	0. 08
Deaths per 100 cases, 1927.....	8. 30

GONORRHEA

39 States :

Cases reported, 1927 (population 102,777,000).....	143, 454
Cases per 1,000 inhabitants, 1927.....	1. 40

INFLUENZA

45 States:¹

Deaths registered, 1927 (population 114,542,000).....	24, 241
Deaths per 1,000 inhabitants, 1927.....	0. 21

MEASLES

46 States:¹

Cases reported, 1927 (population 117,391,000).....	441, 349
Estimated expectancy, based on years 1920-1926.....	334, 105
Cases per 1,000 inhabitants, 1927.....	3. 76
Cases per 1,000 inhabitants, estimated expectancy.....	3. 02

45 States:¹

Deaths registered, 1927 (population 114,542,000).....	4, 122
Deaths per 1,000 inhabitants, 1927.....	0. 04

44 States:¹

Deaths registered, 1927 (population 113,828,000).....	4, 096
Deaths per 1,000 inhabitants, 1927.....	0. 04
Deaths per 100 cases, 1927.....	0. 94

MUMPS

41 States:

Cases reported, 1927 (population 102,686,000).....	122, 474
Estimated expectancy, based on years 1922-1926.....	63, 288
Cases per 1,000 inhabitants, 1927.....	1. 19
Cases per 1,000 inhabitants, estimated expectancy.....	0. 63

42 States:

Deaths registered, 1927 (population 109,131,000).....	100
Deaths per 1,000 inhabitants, 1927.....	0. 001

38 States:

Deaths registered, 1927 (population 98,103,000).....	86
Deaths per 1,000 inhabitants, 1927.....	0. 001
Cases reported for each death registered, 1927.....	1, 337. 99

PELLAGRA

18 States:¹

Cases reported, 1927 (population 53,282,000).....	22, 080
---	---------

36 States:¹

Deaths registered, 1927 (population 105,800,000).....	5, 843
Deaths per 1,000 inhabitants, 1927.....	0. 06

¹ The District of Columbia is also included.

PNEUMONIA (ALL FORMS)

45 States:¹

Deaths registered, 1927 (population 114,542,000).....	92, 127
Deaths per 1,000 inhabitants, 1927.....	0. 80

POLIOMYELITIS

45 States:¹

Cases reported, 1927 (population 113,722,000).....	10, 151
Estimated expectancy, based on years 1920-1926.....	3, 043
Cases per 1,000 inhabitants, 1927.....	0. 089
Cases per 1,000 inhabitants, estimated expectancy.....	0. 028

45 States:¹

Deaths registered, 1927 (population 114,542,000).....	2, 146
Deaths per 1,000 inhabitants, 1927.....	0. 019
Deaths per 100 cases, 1927.....	20. 990

SCARLET FEVER

47 States:¹

Cases reported, 1927 (population 118,105,000).....	208, 893
Estimated expectancy, based on years 1920-1926.....	172, 887
Cases per 1,000 inhabitants, 1927.....	1. 77
Cases per 1,000 inhabitants, estimated expectancy.....	1. 55

45 States:¹

Deaths registered, 1927 (population 114,542,000).....	2, 374
Deaths per 1,000 inhabitants, 1927.....	0. 02
Deaths per 100 cases, 1927.....	1. 15

SMALLPOX

46 States:¹

Cases reported, 1927 (population 115,567,000).....	36, 315
Estimated expectancy, based on years 1920-1926.....	39, 090
Cases per 1,000 inhabitants, 1927.....	0. 31
Cases per 1,000 inhabitants, estimated expectancy.....	0. 36

45 States:¹

Deaths registered, 1927 (population 114,542,000).....	165
Deaths per 1,000 inhabitants, 1927.....	0. 001
Deaths per 100 cases, 1927.....	0. 48

SYPHILIS

40 States:

Cases reported, 1927 (population 102,854,000).....	170, 322
Cases per 1,000 inhabitants, 1927.....	1. 66

TUBERCULOSIS (ALL FORMS)

44 States:¹

Deaths registered, 1927 (population 114,465,000).....	89, 014
Deaths per 1,000 inhabitants, 1927.....	0. 778

TUBERCULOSIS (RESPIRATORY SYSTEM)

43 States:¹

Deaths registered, 1927 (population 110,596,000).....	76, 706
Deaths per 1,000 inhabitants, 1927.....	0. 694

¹ The District of Columbia is also included.

TYPHOID FEVER

46 States:¹

Cases reported, 1927 (population 115,680,000).....	34, 411
Estimated expectancy, based on years 1920-1926.....	36, 724
Cases per 1,000 inhabitants, 1927.....	0. 30
Cases per 1,000 inhabitants, estimated expectancy.....	0. 34

45 States:¹

Deaths registered, 1927 (population 114,542,000).....	6, 480
Deaths per 1,000 inhabitants, 1927.....	0. 06
Deaths per 100 cases, 1927.....	19. 91

WHOOPING COUGH

47 States:¹

Cases reported, 1927 (population 118,105,000).....	178, 455
Estimated expectancy, based on years 1922-1926.....	146, 706
Cases per 1,000 inhabitants, 1927.....	1. 51
Cases per 1,000 inhabitants, estimated expectancy.....	1. 30

45 States:¹

Deaths registered, 1927 (population 114,542,000).....	7, 220
Deaths per 1,000 inhabitants, 1927.....	0. 06
Cases reported for each death registered, 1927.....	24. 48

DEATH RATE IN A GROUP OF INSURED PERSONS

Rates for Principal Causes of Death, November, 1928

The accompanying table is taken from the Statistical Bulletin for December, 1928, issued by the Metropolitan Life Insurance Co., and presents the mortality record of the industrial insurance department of the company, by principal causes of death, for November, 1928, as compared with October, 1928, and with November, 1927. The rates are based on a strength of approximately 18,500,000 insured persons in the United States and Canada.

The Bulletin states:

The November death rate among the industrial populations of the United States and Canada, was 8.2 per 1,000. This is well below the average mortality figure for that month.

There was an above-average amount of sickness from influenza during November, more particularly in the Far West. Up to the end of that month, nevertheless, the large number of cases reported had not been reflected in an increased death rate from influenza-pneumonia. Sickness from this disease increased during the first half of December, with more or less serious outbreaks in various parts of the country. During the first three weeks of December, death claims paid in the industrial department of the company's home office (for all causes combined), rose sharply from a total of 5,179 for the week ended December 1, to 6,429 for that ended December 22. In seven western States (California, Oregon, Washington, Utah, Idaho, Montana, and Colorado) deaths from influenza and pneumonia increased five-fold between November 12 and December 15, the rise being continuous from week to week.

With the exception of diabetes, heart disease, and accidents (the death rates for which were unchanged from those reported in November, 1927), and respiratory diseases, other than pneumonia, all of the causes of death listed in the table show improved death rates as compared with November of last year.

¹ The District of Columbia is also included.

Death rates (annual basis) per 100,000 for principal causes of death

[Industrial department, Metropolitan Life Insurance Co.]

Causes of death	Death rate per 100,000 lives exposed ¹			
	November, 1928	October, 1928	November, 1927	Year, 1927
Total, all causes.....	822.9	851.9	861.2	887.9
Typhoid fever.....	2.9	4.2	4.3	4.6
Measles.....	.9	.3	1.0	4.1
Scarlet fever.....	1.5	1.8	2.6	3.1
Whooping cough.....	2.9	5.0	3.9	6.4
Diphtheria.....	9.8	9.5	12.5	10.6
Influenza.....	14.1	8.6	11.2	17.8
Tuberculosis (all forms).....	75.6	83.0	80.3	99.6
Tuberculosis of respiratory system.....	65.7	78.1	71.2	81.9
Cancer.....	71.6	77.5	74.5	74.3
Diabetes mellitus.....	16.4	15.8	16.4	16.8
Cerebral hemorrhage.....	51.7	51.9	53.9	55.1
Organic diseases of heart.....	137.3	131.1	137.0	132.5
Pneumonia (all forms).....	63.1	57.3	66.8	77.7
Other respiratory diseases.....	16.8	16.0	15.1	11.7
Diarrhea and enteritis.....	19.1	37.5	29.4	24.6
Bright's disease (chronic nephritis).....	65.2	64.6	67.6	69.5
Puerperal state.....	11.6	12.6	14.7	15.5
Suicides.....	7.6	8.2	8.1	8.3
Homicides.....	6.6	6.5	7.7	7.3
Other external causes (excluding suicides and homicides).....	63.4	63.7	63.2	63.9
Traumatism by automobiles.....	20.2	21.6	21.1	18.4
All other causes.....	184.7	190.7	190.8	190.5

¹ All figures include infants insured under one year of age.

COURT DECISION RELATING TO PUBLIC HEALTH

Protection of junk piles required to prevent accumulation of water in containers resulting in breeding of mosquitoes.—(Arkansas Supreme Court; *Yaffe v. City of Fort Smith et al.*, 10 S. W. (2d) 886; decided November 19, 1928.) The appellant operated a junk yard in the city of Fort Smith, and action was brought against him on the ground that the junk yard constituted a nuisance. The evidence tended to show that there were, among the junk, containers which held water; and that this condition would result in the breeding of mosquitoes which would affect the health of persons in the vicinity. The supreme court's holding is shown by the following quotation from the opinion:

The evidence in this case, however, indicates that appellant's junk piles may be so protected that no water can get into the containers and so protected that there may be no danger of breeding mosquitoes. And we think that the junk piles complained of should have a roof over them and be so protected that there would be no chance for water to accumulate in containers and no chance for the breeding of mosquitoes, and appellant should be required to do this without any unnecessary delay.

* * * * *

Appellant's business has been established for a number of years, and at the time it was established it was probably not an interference with the rights of any one. But it has become so because of the growth of the city and, having become so, the private rights of appellant must yield to the public good.

We have therefore reached the conclusion that the appellant should be required to protect the property, as above indicated, without unnecessary delay, and that

if he does not do so, he should be required to remove it. The appellant should be permitted to put a roof over his property and protect it in the manner herein indicated within a reasonable time. And, unless it is so protected that it will not be a nuisance, he should be required to remove it. He may be required to remove it at any time if it becomes a nuisance. The junk pile, of course, can be abated by proper proceedings if at any time hereafter it shall become a nuisance.

DEATHS FROM INFLUENZA AND PNEUMONIA IN LARGE CITIES

Deaths from influenza and pneumonia in 78 large cities during nine weeks ended January 12, 1929. (From the Weekly Health Index, January 16, 1929, issued by the Bureau of the Census, Department of Commerce)

INFLUENZA DEATHS

City	Week ended—								
	Nov. 17, 1928	Nov. 24, 1928	Dec. 1, 1928	Dec. 8, 1928	Dec. 15, 1928	Dec. 22, 1928	Dec. 29, 1928	Jan. 5, 1929	Jan. 12, 1929
Total.....	91	105	203	291	477	765	1,081	1,424	1,309
Akron.....	0	0	0	0	2	18	14	5	—
Albany.....	0	0	0	2	1	1	3	4	5
Atlanta.....	1	0	2	10	10	33	51	31	—
Baltimore.....	3	1	5	4	6	8	17	31	46
Birmingham.....	0	0	0	2	4	—	11	60	108
Boston.....	2	2	2	0	2	2	3	4	19
Bridgeport.....	1	0	1	2	0	0	0	3	2
Buffalo.....	1	1	0	0	—	6	4	10	22
Cambridge.....	0	0	0	0	—	0	—	0	0
Camden.....	1	1	0	0	4	—	4	4	10
Canton.....	0	1	0	3	—	—	2	27	13
Chicago.....	6	2	10	10	33	80	104	67	55
Cincinnati.....	2	0	2	0	6	5	9	45	40
Cleveland.....	2	1	1	2	2	25	54	65	65
Columbus.....	0	1	1	0	0	10	22	33	46
Dallas.....	0	2	1	2	0	—	18	25	21
Dayton.....	0	0	1	1	—	0	2	3	—
Denver.....	2	1	15	28	58	50	25	19	15
Des Moines.....	0	0	0	2	6	19	13	10	0
Detroit.....	4	0	4	3	4	22	64	90	73
Duluth.....	0	0	0	2	5	8	2	4	4
El Paso.....	1	1	4	1	4	7	10	19	18
Erie.....	0	1	1	0	—	—	3	10	23
Fall River.....	0	1	0	1	0	0	—	5	8
Flint.....	1	0	0	0	0	2	5	19	16
Fort Worth.....	0	1	2	1	3	3	4	23	37
Grand Rapids.....	1	0	1	1	11	16	18	6	10
Houston.....	0	1	0	1	2	5	12	17	13
Indianapolis.....	0	1	0	3	6	16	15	18	16
Jersey City.....	0	0	0	2	2	3	2	3	7
Kansas City, Kans.....	0	0	0	1	—	23	8	—	0
Kansas City, Mo.....	1	0	1	12	35	20	—	9	4
Knoxville.....	1	1	1	2	1	11	14	15	18
Los Angeles.....	8	14	55	70	85	45	32	25	—
Louisville.....	—	2	—	—	—	1	2	7	8
Lowell.....	0	0	1	0	0	1	0	0	0
Lynn.....	0	0	0	0	—	1	2	—	2
Memphis.....	0	2	1	2	2	3	11	42	—
Milwaukee.....	0	0	0	2	3	10	10	23	36
Minneapolis.....	1	0	2	2	2	21	24	27	20
Nashville.....	1	2	1	—	—	—	8	13	35
New Bedford.....	0	0	0	0	0	—	—	—	1
New Haven.....	0	1	0	1	2	0	1	1	2
New Orleans.....	5	4	9	5	12	37	53	84	52
New York.....	8	14	11	15	16	25	46	65	—
Newark, N. J.....	2	0	0	0	1	2	3	12	22
Oakland.....	3	5	11	3	1	7	7	5	5
Oklahoma City.....	3	1	—	3	—	2	3	11	10
Omaha.....	0	0	0	0	0	—	—	—	—
Paterson.....	0	0	1	1	0	2	0	7	10
Philadelphia.....	6	7	4	14	16	34	47	56	73
Pittsburgh.....	1	8	4	5	17	64	144	177	96

Deaths from influenza and pneumonia in 78 large cities during nine weeks ended January 12, 1929—Continued

INFLUENZA DEATHS

City	Week ended—								
	Nov. 17, 1928	Nov. 24, 1928	Dec. 1, 1928	Dec. 8, 1928	Dec. 15, 1928	Dec. 22, 1928	Dec. 29, 1928	Jan. 5, 1929	Jan. 12, 1929
Portland, Oreg.	0	3	4	1	9	9	11	10	8
Providence	1	0	1	0	0	1	0	2	5
Richmond	0	0	0	1	3	0	4	17	30
Rochester	0	0	0	0	0	1	0	3	6
St. Louis	0	0	0	1	0	1	5	9	10
St. Paul	0	1	0	0	2	3	13	12	13
Salt Lake City	4	3	14	18	13	12	3	3	2
San Antonio	1	1	3	6	6	4	8	11	16
San Diego	1	0	6	11	16	8	6	3	5
San Francisco	11	10	7	9	9	10	9	7	5
Schenectady	0	0	2	0	0	1	0	4	5
Seattle	1	1	6	5	15	15	17	15	11
Somerville	0	0	0	0			0		
Spokane	0	1	0	6	8	11	9	7	3
Springfield, Mass.	0	0	0	0	1	1	0	1	1
Syracuse	1	0	0	0	0	3	6	9	12
Tacoma	0	0	0	0	1	3	10	4	1
Toledo	1	4	2	5	21	27	39	16	20
Trenton	1	0	1	1	0	2	0	6	7
Utica	0	0	1	0	1	0	0	3	2
Washington, D. C.	1	1	0	4	7	3	7	10	25
Waterbury	0	0	1	0	0	0	0	5	0
Wilmington, Del.	0	0	0	0	0	1	4	4	3
Worcester	0	0	0	0					
Yonkers	0	0	0	0	1	0		2	2
Youngstown							15	22	29

PNEUMONIA DEATHS

Total	687	791	853	1,009	1,226	1,046	1,982	2,469	1,974
Akron	1	4	5	8	8	65	38	32	31
Albany	3	7	8	8	4	9	11	12	15
Atlanta	4	5	10	8	14	26	26	19	
Baltimore	24	32	25	35	37	27	51	65	94
Birmingham	6	6	10	9	9	4	7	27	44
Boston	20	22	17	24	24	34	29	39	52
Bridgeport	4	6	1	3	3	2	1	6	12
Buffalo	15	11	15	15	24	33	36	47	65
Cambridge	2	2	2	1	3	2	4	7	7
Camden	3	5	4	5	12	8	6	26	23
Canton	2	2	5	3	6	15	12	10	8
Chicago	49	71	70	85	129	179	226	208	153
Cincinnati	10	15	14	13	11	13	26	63	56
Cleveland	7	13	14	17	19	35	60	106	124
Columbus	5	4	4	6	5	12	26	34	28
Dallas	1	2	4	2	1	4	21	24	27
Dayton	9	2	0	7	3	9	13	13	
Denver	4	9	12	22	51	28	22	16	14
Des Moines	1	0	0	4	2	25	6	8	7
Detroit	31	25	38	39	35	57	112	160	134
Duluth	2	1	1	5	1	2	0	1	3
El Paso	2	3	2	5	6	11	6	6	
Erie	7	2	4	2	3	0	5	3	11
Fall River	1	2	0	3	1	5	7	3	8
Flint	4	5	9	11	2	4	12	17	26
Fort Worth	3	6	1	3	3	7	11	12	13
Grand Rapids	1	5	2	5	5	8	8	3	5
Houston	2	11	4	8	12	17	20	46	81
Indianapolis	11	18	14	19	33	43	48	44	27
Jersey City	11	12	6	8	12	18	17	23	28
Kansas City, Kans.	5	1	5	5	31	12	6	12	7
Kansas City, Mo.	3	5	15	15	29	52	12	23	19
Knoxville	3	6	1	4	1	18	9	18	26
Los Angeles	18	41	57	69	44	36	33	28	
Louisville	10	3	7	14	10	9	13	31	39
Lowell	2	3	1	2	4	4	2	5	4
Lynn	0	1	2	0	3	2	6	1	3
Memphis	8	7	3	17	5	10	12	25	
Milwaukee	5	3	8	8	4	22	36	40	43
Minneapolis	16	4	6	15	8	14	23	21	33

Deaths from influenza and pneumonia in 78 large cities during nine weeks ended January 12, 1929—Continued

PNEUMONIA DEATHS—Continued

City	Week ended—								
	Nov. 17, 1928	Nov. 24, 1928	Dec. 1, 1928	Dec. 8, 1928	Dec. 15, 1928	Dec. 22, 1928	Dec. 29, 1928	Jan. 5, 1929	Jan. 12, 1929
Nashville	3	2	5	10	3	8	4	3	9
New Bedford	3	1	2	4	3	1	3	6	11
New Haven	5	2	3	1	6	6	4	7	9
New Orleans	12	9	12	15	16	22	44	62	-----
New York	137	150	187	173	202	212	223	302	-----
Newark, N. J.	7	10	8	14	10	12	19	32	56
Oakland	6	4	11	6	8	6	7	11	5
Oklahoma City	7	9	2	6	8	7	9	18	37
Omaha	7	5	7	10	34	38	41	19	6
Paterson	3	2	2	3	3	4	2	12	16
Philadelphia	46	43	54	70	83	132	134	207	180
Pittsburgh	27	27	30	16	40	95	149	154	93
Portland, Oreg.	7	5	3	4	11	10	18	20	15
Providence	8	3	8	7	6	7	8	9	10
Richmond	2	6	5	4	4	4	14	14	12
Rochester	8	6	7	3	7	5	8	8	7
St. Louis	19	22	23	22	35	33	66	72	76
St. Paul	5	5	6	5	10	20	20	25	16
Salt Lake City	4	3	5	6	7	4	1	1	4
San Antonio	0	6	10	5	10	8	12	12	-----
San Diego	3	6	5	4	8	4	3	6	8
San Francisco	8	12	19	12	18	14	17	19	11
Schenectady	2	1	1	2	2	2	2	3	-----
Seattle	2	7	5	10	9	13	21	13	13
Somerville	2	1	2	2	3	1	5	7	-----
Spokane	2	3	4	4	12	9	6	4	-----
Springfield, Mass.	0	3	5	6	3	4	9	10	17
Syracuse	7	8	7	9	4	3	10	17	24
Tacoma	1	1	1	3	6	3	2	4	-----
Toledo	4	6	8	8	7	17	27	18	14
Trenton	0	3	2	1	4	7	8	14	23
Utica	5	7	4	3	3	8	11	11	15
Washington, D. C.	13	12	8	11	10	19	19	20	37
Waterbury	0	5	3	3	1	2	2	0	2
Wilmington, Del.	3	6	0	0	4	3	5	11	9
Worcester	0	4	2	3	0	0	2	5	-----
Yonkers	2	4	6	5	4	2	7	11	9
Youngstown	2	3	5	3	6	17	19	9	10

Blank spaces indicate that no report has been received.

DEATHS DURING WEEK ENDED JANUARY 12, 1929

Summary of information received by telegraph from industrial insurance companies for the week ended January 12, 1929, and corresponding week of 1928. (From the Weekly Health Index, January 16, 1929, issued by the Bureau of the Census, Department of Commerce)

	Week ended Jan. 12, 1929	Corresponding week, 1928
Policies in force	72, 481, 951	69, 954, 836
Number of death claims	19, 561	15, 439
Death claims per 1,000 policies in force, annual rate	14.1	11.5

Deaths from all causes in certain large cities of the United States during the week ended January 12, 1929, infant mortality, annual death rate, and comparison with corresponding week of 1928. (From the Weekly Health Index, January 16, 1929, issued by the Bureau of the Census, Department of Commerce)

City	Week ended Jan. 12, 1929		Annual death rate per 1,000, corresponding week, 1928	Deaths under 1 year		Infant mortality rate, week ended Jan. 12, 1929 ¹
	Total deaths	Death rate ¹		Week ended Jan. 12, 1929	Corresponding week, 1928	
Total (65 cities).....	11,701	20.5	14.2	1,039	797	90
Albany ⁴	50	21.7	17.4	4	4	70
Atlanta.....	113	23.2	19.3	5	15	52
White.....	68			3	9	
Colored.....	45	(⁵)	(⁵)	2	6	
Baltimore ⁴	397	25.0	16.9	34	20	109
White.....	311			20	14	80
Colored.....	86	(⁵)	(⁵)	14	6	222
Birmingham.....	262	61.6	18.1	21	5	190
White.....	144			11	1	165
Colored.....	118	(⁵)	(⁵)	10	4	229
Boston.....	296	19.4	16.4	26	19	72
Bridgeport.....	47			3	8	52
Buffalo.....	268	25.2	13.3	26	17	112
Cambridge.....	39	16.2	12.1	4	2	72
Camden.....	61	23.6	12.0	7	4	121
Canton.....	47	21.0	10.3	5	3	119
Chicago ⁴	1,054	17.5	13.9	111	71	99
Cincinnati.....	280			25	15	146
Cleveland.....	417	21.6	10.2	39	21	115
Columbus.....	169	29.6	14.9	16	4	150
Dallas.....	106	25.4	18.0	11	6	
White.....	86			8	4	
Colored.....	20	(⁵)	(⁵)	3	2	
Denver.....	109	19.4	17.1	11	13	106
Des Moines.....	40	13.8	15.8	0	3	0
Detroit.....	546	20.7	10.8	81	35	130
Duluth.....	24	10.7	14.8	1	2	24
El Paso.....	52	23.1	12.9	9	4	
Erie.....	66			3	2	61
Fall River ⁴	52	20.2	12.5	8	6	150
Flint.....	66	23.2	9.1	5	6	61
Fort Worth.....	81	24.8	13.5	8	8	
White.....	72			6	6	
Colored.....	9	(⁵)	(⁵)	2	2	
Grand Rapids.....	44	14.0	8.0	3	2	45
Houston.....	117			8	9	
White.....	94			6	9	
Colored.....	23	(⁵)	(⁵)	2	0	
Indianapolis.....	128	17.5	15.6	14	9	112
White.....	111			13	8	121
Colored.....	17	(⁵)	(⁵)	1	1	60
Jersey City.....	118	19.0	11.3	10	13	77
Kansas City, Kans.....	36	15.9	19.9	6	6	133
White.....	27			3	5	76
Colored.....	9	(⁵)	(⁵)	3	1	538
Kansas City, Mo.....	99	13.2	14.6	11	9	93
Knoxville.....	56	27.8	21.3	8	6	175
White.....	56			8	6	195
Colored.....	0	(⁵)	(⁵)	0	0	0
Los Angeles.....	308			26	26	76
Louisville.....	129	20.5	14.0	12	0	97
White.....	129				0	
Colored.....		(⁵)	(⁵)		0	
Lowell.....	30			3	4	68
Lynn.....	24	11.9	10.9	0	5	0
Memphis.....	140	38.5	23.9	13	3	153
White.....	88			7	2	132
Colored.....	52	(⁵)	(⁵)	6	1	188
Milwaukee.....	210	20.2	12.3	23	24	101
Minneapolis.....	178	20.4	13.2	14	11	87
Nashville.....	116	43.4	20.6	7	6	113
White.....	71			3	3	65
Colored.....	45	(⁵)	(⁵)	4	3	252
New Bedford.....	45			6	5	129
New Haven.....	48	13.4	13.9	2	4	31

Footnotes on p. 192.

Deaths from all causes in certain large cities of the United States during the week ended January 12, 1929, infant mortality, annual death rate, and comparison with corresponding week of 1928—Continued

City	Week ended Jan. 12, 1929		Annual death rate per 1,000, corresponding week, 1928	Deaths under 1 year		Infant mortality rate, week ended Jan. 12, 1929 ¹
	Total deaths	Death rate ²		Week ended Jan. 12, 1929	Corresponding week, 1928	
New Orleans.....	266	32.4	20.6	15	11	74
White.....	177			5	8	35
Colored.....	89	(³)	(³)	10	3	168
New York.....	2,133	18.5	15.0	192	207	79
Bronx Borough.....	278	15.3	12.3	31	28	92
Brooklyn Borough.....	746	16.9	12.5	64	70	65
Manhattan Borough.....	837	25.0	22.1	65	87	79
Queens Borough.....	225	13.8	9.8	30	20	122
Richmond Borough.....	47	16.3	15.6	2	2	36
Newark, N. J.....	196	21.6	12.1	21	11	111
Oakland.....	68	13.0	13.4	2	2	22
Oklahoma City.....	74			6	5	120
Omaha.....	55	12.9	14.1	7	3	82
Paterson.....	67	24.2	10.1	1	0	18
Philadelphia.....	824	20.9	13.5	66	48	93
Pittsburgh.....	386	30.0	15.8	33	21	113
Portland, Oreg.....	96			1	8	11
Providence.....	71	13.0	12.4	8	9	70
Richmond.....	111	29.9	14.0	1	11	14
White.....	69			0	5	0
Colored.....	42	(³)	(³)	1	6	41
Rochester.....	110	17.5	11.9	11	7	93
St. Louis.....	369	22.7	14.8	24	7	81
St. Paul.....	84			4	5	41
Salt Lake City ⁴	36	13.6	11.4	0	3	0
San Antonio.....	87	20.9	19.7	12	9	38
San Diego.....	75	32.8	13.5	2	1	38
San Francisco.....	187	16.7	13.8	6	10	11
Schenectady.....	38	21.3	14.6	3	4	96
Seattle.....	115	15.7	13.6	4	5	42
Somerville.....	19	9.7	12.2	4	3	144
Spokane.....	54	25.9	14.9	8	1	298
Springfield, Mass.....	52	18.1	15.4	6	5	99
Syracuse.....	86	22.6	11.8	2	3	24
Tacoma.....	30	14.2	10.4	2	4	51
Toledo.....	126	21.0	11.4	8	6	75
Trenton.....	69	26.0	13.9	7	4	127
Utica.....	50	25.1	17.1	2	4	51
Washington, D. C.....	240	22.7	15.3	20	12	117
White.....	148			8	6	68
Colored.....	92	(³)	(³)	12	6	227
Waterbury.....	22			6	1	152
Wilmington, Del.....	35	14.2	14.6	5	3	130
Worcester.....	51	13.5	12.4	4	4	50
Yonkers.....	43	18.5	12.1	1	5	23
Youngstown.....	77	23.1	9.9	7	8	101

¹ Annual rate per 1,000 population.

² Deaths under 1 year per 1,000 births. Cities left blank are not in the registration area for births.

³ Data for 71 cities.

⁴ Deaths for week ended Friday.

⁵ In the cities for which deaths are shown by color the colored population in 1920 constituted the following percentages of the total population: Atlanta, 31; Baltimore, 15; Birmingham, 39; Dallas, 15; Fort Worth, 14; Houston, 25; Indianapolis, 11; Kansas City, Kans., 14; Knoxville, 15; Louisville, 17; Memphis, 38; Nashville, 30; New Orleans, 26; Richmond, 32; and Washington, D. C., 25.

PREVALENCE OF DISEASE

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring

UNITED STATES

CURRENT WEEKLY STATE REPORTS

These reports are preliminary and the figures are subject to change when later returns are received by the State health officers

Reports for Weeks Ended January 12, 1929, and January 14, 1928

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended January 12, 1929, and January 14, 1928

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928
New England States:								
Maine.....	1	2	722	3	216	59	0	0
New Hampshire.....			75		38		0	
Vermont.....			373	2	9	2	0	0
Massachusetts.....	117	129	1,976	10	792	1,202	3	1
Rhode Island.....	6	17	208		72	5	0	0
Connecticut.....	30	44	2,079	3	390	142	2	0
Middle Atlantic States:								
New York.....	283	421	12,649	122	946	1,119	37	2
New Jersey.....	164	198	2,474	24	189	188	9	3
Pennsylvania.....	162	251			913	857	0	2
East North Central States:								
Ohio.....	64	195	4,778	53	655	176	15	0
Indiana.....	53	47	988	33	134	87	0	0
Illinois.....	161	184	1,240	33	339	58	7	9
Michigan.....	94	109	3,394	9	94	354	18	1
Wisconsin.....	20	40	3,830	87	191	28	10	3
West North Central States:								
Minnesota.....	17	39	252	1	121	6	3	2
Iowa.....	16	12	103			82	6	3
Missouri ¹	67	46	3,122	11	27	30	4	5
North Dakota.....	4	9	546		10	1	3	3
South Dakota.....			264*	1	31	45	4	0
Nebraska.....	17	11	383		13	4	0	3
Kansas.....	21	32	1,697	10	18	25	1	7
South Atlantic States:								
Delaware.....	3	1	155	2	41	17	0	0
Maryland ¹	31	25	5,816	49	46	249	2	1
District of Columbia.....	8	32	567	2	2	7	0	0
West Virginia.....	21	14	13,711	31	141	71	3	1
North Carolina.....	56	80			23	3,680	0	0
South Carolina.....	20	49	6,421	1,439	5	1,450	0	0
Georgia.....	8	23	7,739	184	59	173	1	0
Florida.....	6	28	820	11	2	7	0	1

¹ New York City only.

* Figures for 1929 are exclusive of Kansas City.

¹ Week ended Friday.

*Cases of certain communicable diseases reported by telegraph by State health officers
for weeks ended January 12, 1929, and January 14, 1928—Continued*

Division and State	Diphtheria		Influenza		Measles		Meningococcus meningitis	
	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928
East South Central States:								
Kentucky.....	7	13	6, 170	8	51	0	0	0
Tennessee.....	26	17	12, 599	141	28	445	1	0
Alabama.....	34	33	19, 987	224	69	165	0	0
Mississippi.....	9	16	5, 030				2	2
West South Central States:								
Arkansas.....	8	19	5, 289	266	12	183	12	0
Louisiana.....	29	29	6, 163	48	33	62	4	1
Oklahoma ⁴	35	55	9, 079	187	9	60	8	2
Texas.....	44	89	6, 695	65	89	36	1	1
Mountain States:								
Montana.....	4	1	333		72	1	4	0
Idaho.....	1		9		5	2	0	0
Wyoming.....	4	1	311		3		2	7
Colorado.....	6	18	117		13	61	6	3
New Mexico.....	8	7	125			46	2	0
Arizona.....	10	35	10		1	27	7	1
Utah ²	7	9	14	4			5	3
Pacific States:								
Washington.....	12	8	151	1	83	269	9	5
Oregon.....	21	14	741	23	49	46	1	0
California.....	61	129	976	34	26	96	19	9

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928
New England States:								
Maine.....	2	1	22	26	1	0	0	1
New Hampshire.....	0		7		0		0	
Vermont.....	0	0	13	0	1	0	0	0
Massachusetts.....	1	6	262	364	0	0	2	5
Rhode Island.....	0	0	19	38	0	0	0	1
Connecticut.....	0	0	50	112	0	53	0	3
Middle Atlantic States:								
New York.....	0	6	505	626	1	18	15	15
New Jersey.....	2	1	131	205	0	0	2	5
Pennsylvania.....	0	3	261	450	0	0	5	20
East North Central States:								
Ohio.....	0	5	251	295	17	23	4	14
Indiana.....	0	1	116	115	52	125	0	2
Illinois.....	2	1	299	366	100	25	4	16
Michigan.....	2	2	277	306	26	49	1	9
Wisconsin.....	0	1	123	164	36	27	3	0
West North Central States:								
Minnesota.....	0	1	114	137	2	3	0	4
Iowa.....	1	3	114	84	11	100	0	1
Missouri ²	0	2	75	96	44	51	1	4
North Dakota.....	0	3	24	29	5	6	1	1
South Dakota.....	0	0	33	40	28	7	2	1
Nebraska.....	0	1	60	83	26	44	1	1
Kansas.....	0	4	106	102	12	125	2	1
South Atlantic States:								
Delaware.....	0	0	2	5	0	0	1	0
Maryland ³	0	1	62	69	1	0	3	6
District of Columbia.....	0	0	15	37	0	0	0	0
West Virginia.....	0	4	40	56	16	17	6	10
North Carolina.....	0	1	53	81	16	106	0	4
South Carolina.....	2	1	13	10	0	33	5	0
Georgia.....	0	0	25	24	0	0	3	9
Florida.....	0	0	10	14	0	10	2	3

² Figures for 1929 are exclusive of Kansas City.

³ Week ended Friday.

⁴ Figures for 1929 are exclusive of Oklahoma City and Tulsa and for 1928 are exclusive of Tulsa.

Cases of certain communicable diseases reported by telegraph by State health officers for weeks ended January 12, 1929, and January 14, 1928—Continued

Division and State	Poliomyelitis		Scarlet fever		Smallpox		Typhoid fever	
	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928	Week ended Jan. 12, 1929	Week ended Jan. 14, 1928
East South Central States:								
Kentucky.....	0	0	0	58	17	27	2	3
Tennessee.....	0	1	29	21	0	28	3	7
Alabama.....	0	0	24	16	18	4	1	12
Mississippi.....	0	0	11	20	1	7	1	5
West South Central States:								
Arkansas.....	0	0	27	26	1	9	12	3
Louisiana.....	0	1	34	11	11	11	6	11
Oklahoma ¹	1	1	21	41	62	201	8	7
Texas.....	0	2	56	90	12	78	5	6
Mountain States:								
Montana.....	0	0	52	35	13	37	2	0
Idaho.....	0	0	4	25	28	11	1	1
Wyoming.....	0	0	32	34	5	18	0	0
Colorado.....	0	2	5	151	5	18	1	0
New Mexico.....	0	0	6	9	0	0	1	1
Arizona.....	0	0	8	8	0	0	0	1
Utah ²	0	0	12	17	10	33	0	0
Pacific States:								
Washington.....	0	6	33	54	56	70	0	4
Oregon.....	1	4	23	32	56	49	0	3
California.....	2	8	264	206	37	22	1	13

¹ Week ended Friday.

² Figures for 1929 are exclusive of Oklahoma City and Tulsa and for 1928 are exclusive of Tulsa.

SUMMARY OF MONTHLY REPORTS FROM STATES

The following summary of monthly State reports is published weekly and covers only those States from which reports are received during the current week:

State	Menin- gococ- cus menin- gitis	Diph- theria	Influ- enza	Ma- laria	Mea- sles	Pel- lagra	Poli- mye- litis	Scarlet fever	Small- pox	Ty- phoid fever
November, 1928										
Colorado.....	10	99	132	-----	30	-----	6	110	14	19
Kansas.....	3	143	388	1	28	-----	1	447	106	24
December, 1928										
Arizona.....	6	20	4,143	-----	33	-----	2	15	15	5
Connecticut ¹	9	138	460	-----	784	-----	3	208	2	10
Maine.....	-----	36	611	-----	1,613	-----	3	151	33	4
Nebraska.....	3	61	5,567	-----	54	-----	2	192	142	9
North Dakota.....	11	47	28,003	-----	36	-----	0	120	16	12
Porto Rico.....	-----	54	659	3,642	83	6	0	1	0	130
Tennessee.....	9	153	18,733	53	14	17	2	196	28	48
Vermont.....	0	18	301	-----	93	-----	1	90	5	0

¹ The 16 cases published in Public Health Reports dated Nov. 16, 1928, p. 3043, as botulism, upon later investigation were found to be food poisoning but not botulism.

November, 1928			November, 1928—Continued		
Chicken pox:	Cases		Impetigo contagiosa:	Cases	
Colorado.....	380		Colorado.....	12	
Kansas.....	776		Kansas.....	2	
German measles:			Mumps:		
Colorado.....	5		Colorado.....	116	
Kansas.....	19		Kansas.....	181	

November, 1928—Continued		December, 1928—Continued	
Ophthalmia neonatorum:	Cases	Mumps:	Cases
Kansas.....	1	Arizona.....	8
Puerperal septicaemia:		Connecticut.....	235
Colorado.....	1	Maine.....	215
Septic sore throat:		Nebraska.....	9
Colorado.....	1	North Dakota.....	5
Kansas.....	1	Porto Rico.....	26
Tetanus:		Tennessee.....	19
Kansas.....	1	Vermont.....	342
Tularaemia:		Ophthalmia neonatorum:	
Colorado.....	1	Connecticut.....	1
Kansas.....	4	Tennessee.....	3
Vincent's angina:		Paratyphoid fever:	
Colorado.....	6	Maine.....	1
Whooping cough:		Puerperal fever:	
Colorado.....	34	Porto Rico.....	20
Kansas.....	231	Rabies in animals:	
		Connecticut.....	4
		Scabies:	
		North Dakota.....	3
		Septic sore throat:	
		Connecticut.....	5
		Maine.....	1
		Nebraska.....	3
		North Dakota.....	1
		Tetanus:	
		Connecticut.....	1
		Maine.....	1
		Porto Rico.....	17
		Tetanus (infantile):	
		Porto Rico.....	29
		Trachoma:	
		Arizona.....	3
		North Dakota.....	5
		Porto Rico.....	1
		Tennessee.....	6
		Tularaemia:	
		North Dakota.....	1
		Tennessee.....	2
		Vincent's angina:	
		Maine.....	8
		North Dakota.....	39
		Whooping cough:	
		Arizona.....	10
		Connecticut.....	132
		Maine.....	131
		Nebraska.....	38
		North Dakota.....	61
		Porto Rico.....	94
		Tennessee.....	65
		Vermont.....	244

GENERAL CURRENT SUMMARY AND WEEKLY REPORTS FROM CITIES

The 95 cities reporting cases used in the following table are situated in all parts of the country and have an estimated aggregate population of more than 31,060,000. The estimated population of the 88 cities reporting deaths is more than 29,490,000. The estimated expectancy is based on the experience of the last nine years, excluding epidemics.

Weeks ended January 5, 1929, and January 7, 1928

	1929	1928	Estimated expectancy		1929	1928	Estimated expectancy
Cases reported				Cases reported—Continued			
Diphtheria:				Typhoid fever:			
45 States.....	1,724	1,987		45 States.....	114	230	
95 cities.....	885	989	1,551	95 cities.....	22	29	39
Measles:				Deaths reported			
44 States.....	4,598	6,980		Influenza and pneumonia:			
95 cities.....	1,185	3,004		88 cities.....	3,437	1,085	
Poliomyelitis: 45 States.....	14	62		Smallpox: 88 cities.....	0	0	
Scarlet fever:							
45 States.....	3,485	3,861					
95 cities.....	1,157	1,207	1,368				
Smallpox:							
45 States.....	623	901					
95 cities.....	21	100	70				

City reports for week ended January 5, 1929

The "estimated expectancy" given for diphtheria, poliomyelitis, scarlet fever, smallpox, and typhoid fever is the result of an attempt to ascertain from previous occurrence the number of cases of the disease under consideration that may be expected to occur during a certain week in the absence of epidemics. It is based on reports to the Public Health Service during the past nine years. It is in most instances the median number of cases reported in the corresponding weeks of the preceding years. When the reports include several epidemics, or when for other reasons the median is unsatisfactory, the epidemic periods are excluded and the estimated expectancy is the mean number of cases reported for the week during nonepidemic years.

If the reports have not been received for the full nine years, data are used for as many years as possible, but no year earlier than 1920 is included. In obtaining the estimated expectancy the figures are smoothed when necessary to avoid abrupt deviation from the usual trend. For some of the diseases given in the table the available data were not sufficient to make it practicable to compute the estimated expectancy.

Division, State, and city	Population, July 1, 1926 estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
NEW ENGLAND									
Maine:									
Portland.....	76,400	12	1	0	66	1	63	0	2
New Hampshire:									
Concord.....	122,546	0	0	0	22	1	0	0	1
Manchester.....	84,000	0	2	3	-----	0	0	0	0
Nashua.....	29,723	0	0	0	-----	0	0	0	0
Vermont:									
Barre.....	110,008	0	0	0	-----	0	0	5	0
Burlington.....	24,089	4	0	0	11	0	0	5	1
Massachusetts:									
Boston.....	787,000	82	55	29	224	4	8	11	39
Fall River.....	131,000	4	6	2	33	5	81	0	3
Springfield.....	145,000	15	4	18	4	1	210	4	3
Worcester.....	193,000	14	6	3	2	0	15	3	5
Rhode Island:									
Pawtucket.....	71,000	13	2	0	28	1	19	0	4
Providence.....	275,000	0	11	8	124	2	10	0	9
Connecticut:									
Bridgeport.....	(?)	4	8	5	219	3	17	2	4
Hartford.....	164,000	3	8	6	100	3	1	6	12
New Haven.....	182,000	31	3	1	16	0	2	1	7
MIDDLE ATLANTIC									
New York:									
Buffalo.....	544,000	33	19	20	264	10	4	1	47
New York.....	5,924,000	274	220	247	965	55	78	76	302
Rochester.....	321,000	30	12	7	214	3	18	16	7
Syracuse.....	185,000	19	7	1	564	9	1	3	17
New Jersey:									
Camden.....	131,000	3	7	2	4	4	2	0	26
Newark.....	459,000	43	20	49	789	16	4	26	36
Trenton.....	134,000	1	5	7	103	6	0	1	14

¹ Estimated, July 1, 1925.

² No estimate made.

City reports for week ended January 5, 1929—Continued

Division, State, and city	Population, July 1, 1926 estimated	Chicken pox, cases reported	Diphtheria		Influenza		Measles, cases reported	Mumps, cases reported	Pneumonia, deaths reported
			Cases, estimated expectancy	Cases reported	Cases reported	Deaths reported			
MIDDLE ATLANTIC—con.									
Pennsylvania:									
Philadelphia.....	2,008,000	80	86	31	612	56	7	2	207
Pittsburgh.....	637,000	63	25	4	30	177	20	4	154
Reading.....	114,000	7	4	0		6	32	1	9
Scranton.....	143,000	0	5	6	10	2	25	0	3
EAST NORTH CENTRAL									
Ohio:									
Cincinnati.....	411,000	6	15	9	290	45	1	0	65
Cleveland.....	960,000	77	44	15	1,287	65	161	2	106
Columbus.....	285,000	7	7	1	386	33	2	0	34
Toledo.....	295,000	34	12	8	16	16	3	1	18
Indiana:									
Fort Wayne.....	99,900	6	5	3		3	0	0	13
Indianapolis.....	367,000	20	11	23		18	8	3	44
South Bend.....	81,700	0	1	0		0	1	0	13
Terre Haute.....	71,900	1	1	0	9	0	0	0	12
Illinois:									
Chicago.....	3,048,000	90	95	110	343	67	58	5	206
Springfield.....	64,700	1	2	1	44	4	1	0	4
Michigan:									
Detroit.....	1,242,044	71	71	71	1,157	90	6	17	160
Flint.....	136,000	16	8	2	499	19	4	0	17
Grand Rapids.....	156,000	7	4	1	160	6	11	2	3
Wisconsin:									
Kenosha.....	52,700	3	2	0	3	1	5	0	7
Milwaukee.....	517,000	84	73	0	1,253	23	81	4	40
Racine.....	69,400	22	2	0	43	0	22	0	3
Superior.....	139,671	1	1	4		0	0	0	2
WEST NORTH CENTRAL									
Minnesota:									
Duluth.....	113,000	6	3	0		4	1	12	1
Minneapolis.....	434,000	178	22	13	1,327	27	36	6	21
St. Paul.....	248,000	61	15	5		16	4	5	19
Iowa:									
Des Moines.....	146,000	0	4	1	0		0	0	
Sioux City.....	78,000	3	2	1	0		0	1	
Waterloo.....	36,900	1	0	0			2	31	
Missouri:									
Kansas City.....	375,000	11	10	4	2	9	47	7	0
St. Joseph.....	78,400	2	2	1	209	4	0	0	6
St. Louis.....	830,000	46	52	52	91	9	7	0	
North Dakota:									
Fargo.....	126,403	3	0	0		1	0	0	0
Grand Forks.....	14,811	0	0	0	8		0	0	
South Dakota:									
Aberdeen.....	115,038	5	0	0	0		0	0	
Sioux Falls.....	130,127	0	1	0			2	0	
Nebraska:									
Lincoln.....	62,000	1	2	0		0	1	0	0
Omaha.....	216,000	3	5	5		0	0	0	19
Kansas:									
Topeka.....	56,500	26	2	0	23	7	6	0	2
Wichita.....	92,500	2	4	3		3	0	0	4
SOUTH ATLANTIC									
Delaware:									
Wilmington.....	124,000	0	3	1		2	22	0	11
Maryland:									
Baltimore.....	606,000	110	42	15	1,745	31	4	70	65
Cumberland.....	133,741	1	1	0	53	4	30	1	0
Frederick.....	112,035	0	1	0	4	1	0	0	1
District of Columbia:									
Washington.....	528,000	42	22	19	658	10	1	0	20
Virginia:									
Lynchburg.....	138,493	5	2	1	1,638	5	0	15	12
Norfolk.....	174,000	5	3	0	546	1	0	1	11
Richmond.....	189,000	0	8	5	979	26	0	0	13
Roanoke.....	61,900	0	2	4		17	1	0	5
West Virginia:									
Charleston.....	50,700	0	1	1	9	4	0	0	6
Wheeling.....	56,208	0	2	1	724	15	2	46	8

¹ Estimated, July 1, 1925.

² Special census.

³ Nonresident.

City reports for week ended January 5, 1929—Continued

Division, State, and city	Population, July 1, 1926 estimated	Chick- en pox, cases re- ported	Diphtheria		Influenza		Meas- les, cases re- ported	Mumps, cases re- ported	Pneu- monia, deaths re- ported
			Cases es- timated expect- ancy	Cases re- ported	Cases re- ported	Deaths re- ported			
SOUTH ATLANTIC—con.									
North Carolina:									
Raleigh	¹ 30,371	4	1	1		12	0	0	0
Wilmington	37,700	4	1	1	10	4	0	0	
Winston-Salem	71,800	16	1	2		0	1	0	8
South Carolina:									
Charleston	74,100	0	1	1	556	8	0	0	8
Columbia	41,800	1	0	1		2	0	0	5
Georgia:									
Atlanta	(²)	4	4	3	776	30	0	1	19
Brunswick	¹ 16,809		0						
Savannah	94,900	0	1	1	466	10	0	0	7
Florida:									
Miami	131,286	2	5	3	77	0	8	1	6
St. Petersburg	³ 47,629		0		15	3			2
Tampa	102,000	1	2	2	124	2	0	0	1
EAST SOUTH CENTRAL									
Kentucky:									
Covington	58,500	1	1	0	153	6	0	0	15
Louisville	311,000	4	6	2	963	7	0	0	31
Tennessee:									
Memphis	177,000	4	7	3	6,329	42	0	0	25
Nashville	137,000	0	1	2		13	0	0	3
Alabama:									
Birmingham	211,000	4	4	7	4,156	60	1	0	27
Mobile	66,800	1	1	1	309	10	0	0	2
Montgomery	47,000	1	1	0	482		1	0	
WEST SOUTH CENTRAL									
Arkansas:									
Fort Smith	¹ 31,643	9	1	0	710		1	0	
Little Rock	75,900	2	1	0	67	1	1	13	3
Louisiana:									
New Orleans	419,000	0	13	5	1,307	84	1	0	62
Shreveport	59,500	0	2	0	83	3	0	0	13
Oklahoma:									
Oklahoma City	(²)	0	2	4	594	11	0	0	18
Tulsa	133,000	23	2	3	0		0	9	
Texas:									
Dallas	203,000		11						
Galveston	49,100	1	2	0	100	0	0	0	5
Houston	¹ 164,954	0	6	9	72	17	2	0	46
San Antonio	205,000	1	2	6		8	1	0	12
MOUNTAIN									
Montana:									
Billings	¹ 17,971	6	1	0		0	0	0	0
Great Falls	¹ 29,883	24	0	0	¹ 12	3	41	18	0
Helena	¹ 12,037	0	0	0		0	2	0	0
Missoula	¹ 12,668	0	1	0		0	0	0	0
Idaho:									
Boise	¹ 23,042	0	0	0		0	1	0	0
Colorado:									
Denver	285,000	13	10	7	119	19	0	21	16
Pueblo	43,900	7	2	0		0	0	0	3
New Mexico:									
Albuquerque	¹ 21,000	0	0	1	4	1	0	0	2
Utah:									
Salt Lake City	133,000	36	3	1		3	0	42	1
Nevada:									
Reno	¹ 12,665	0	0	0	1	0	0	0	0
PACIFIC									
Washington:									
Seattle	(²)	15	5	2	20		0	4	
Spokane	109,000	15	2	0	128		12	0	
Tacoma	106,000	8	4	0		4	0	0	4
Oregon:									
Portland	¹ 282,383	6	11	12	52	10	38	2	30
Salem	¹ 19,799	1	0	0	30	1	0	0	1
California:									
Los Angeles	(²)	23	44	15	388	25	4	20	28
Sacramento	73,400	2	3	1	14	4	0	7	2
San Francisco	567,000	6	19	6	52	8	0	5	11

¹ Estimated, July 1, 1925.² No estimate made.³ Special census.⁴ Estimated.

City reports for week ended January 5, 1929—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expec- tancy	Cases re- ported	Cases, esti- mated expec- tancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expec- tancy	Cases re- ported	Deaths re- ported		
NEW ENGLAND											
Maine:											
Portland.....	2	6	0	0	0	0	0	1	0	3	18
New Hampshire:											
Concord.....	0	2	0	0	0	2	0	0	0	0	16
Manchester.....	2	7	0	0	0	0	0	0	0	0	37
Nashua.....	1	0	0	0	0	0	0	0	0	0	4
Vermont:											
Barre.....	1	0	0	0	0	0	0	0	0	1	2
Burlington.....	1	2	0	2	0	1	0	0	0	4	11
Massachusetts:											
Boston.....	82	73	0	0	0	12	1	0	0	24	245
Fall River.....	3	3	0	0	0	4	0	0	0	5	52
Springfield.....	10	14	0	0	0	0	0	0	0	3	51
Worcester.....	13	5	0	0	0	1	0	0	0	4	58
Rhode Island:											
Pawtucket.....	1	2	0	0	0	0	0	0	0	7	23
Providence.....	9	15	0	0	0	1	0	0	0	3	94
Connecticut:											
Bridgeport.....	10	3	0	0	0	0	0	0	0	2	36
Hartford.....	8	3	0	0	0	5	0	0	0	1	50
New Haven.....	9	5	0	0	0	1	0	1	0	2	38
MIDDLE ATLANTIC											
New York:											
Buffalo.....	26	23	0	0	0	9	1	0	0	40	211
New York.....	231	165	0	0	0	114	11	3	1	51	1,709
Rochester.....	15	3	0	0	0	1	0	0	0	21	78
Syracuse.....	13	9	0	2	0	1	0	0	0	22	89
New Jersey:											
Camden.....	6	12	0	0	0	0	0	0	0	4	65
Newark.....	26	7	0	0	0	11	0	0	0	24	181
Trenton.....	4	3	0	0	0	5	0	0	0	0	56
Pennsylvania:											
Philadelphia.....	92	49	0	0	0	37	3	2	1	77	840
Pittsburgh.....	38	25	0	0	0	16	1	0	0	19	585
Reading.....	3	9	0	0	0	0	0	0	0	7	48
Scranton.....	4	1	0	0	0	0	0	0	0	1	-----
EAST NORTH CENTRAL											
Ohio:											
Cincinnati.....	18	22	1	4	0	14	1	0	0	8	267
Cleveland.....	43	25	2	0	0	20	2	0	0	54	402
Columbus.....	11	7	1	0	0	8	0	0	0	5	168
Toledo.....	15	6	1	0	0	8	0	0	0	17	112
Indiana:											
Fort Wayne.....	5	0	1	0	0	0	0	0	0	0	34
Indianapolis.....	10	16	10	0	0	6	0	0	0	7	139
South Bend.....	4	1	0	0	0	1	0	0	0	0	23
Terre Haute.....	3	2	1	0	0	1	0	0	0	0	28
Illinois:											
Chicago.....	134	104	1	3	0	50	3	2	2	34	1,052
Springfield.....	2	12	0	1	0	0	0	1	1	6	31
Michigan:											
Detroit.....	98	119	4	1	0	25	2	2	0	71	576
Flint.....	12	13	1	1	0	2	0	0	0	0	49
Grand Rapids.....	12	5	1	0	0	1	1	0	0	9	48
Wisconsin:											
Kenosha.....	2	2	0	0	0	0	0	0	0	4	17
Milwaukee.....	31	40	1	0	0	8	0	0	0	5	198
Racine.....	7	4	0	0	0	1	0	0	0	8	19
Superior.....	3	3	1	0	0	3	0	0	0	0	17
WEST NORTH CENTRAL											
Minnesota:											
Duluth.....	8	7	0	0	0	1	0	0	0	2	26
Minneapolis.....	55	23	3	0	0	3	0	0	0	1	172
St. Paul.....	29	7	4	0	0	6	0	0	0	10	104
Iowa:											
Des Moines.....	8	13	2	0	-----	-----	0	0	-----	0	37
Sioux City.....	2	0	1	0	-----	-----	0	0	-----	3	-----
Waterloo.....	2	34	0	0	-----	-----	0	0	-----	4	-----

City reports for week ended January 5, 1929—Continued

Division, State, and city	Scarlet fever		Smallpox			Tuber- culosis, deaths re- ported	Typhoid fever			Whoop- ing cough, cases re- ported	Deaths, all causes
	Cases, esti- mated expect- ancy	Cases re- ported	Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		Cases, esti- mated expect- ancy	Cases re- ported	Deaths re- ported		
WEST SOUTH CENTRAL—contd.											
Oklahoma:											
Oklahoma City	3	1	1	1	0	1	0	0	1	0	63
Tulsa	2	2	1	1			0	0		1	
Texas:											
Dallas	4		1				0				
Galveston	0	1	0	0	0	0	0	0	0	0	27
Houston	3	5	2	0	0	5	0	0	0	0	136
San Antonio	2	4	0	1	0	12	0	0	0	1	82
MOUNTAIN											
Montana:											
Billings	2	2	0	0	0	0	0	0	0	0	7
Great Falls	2	0	1	0	0	0	0	0	0	5	8
Helena	1	2	0	0	0	0	0	0	0	0	5
Missoula	1	1	0	0	0	0	0	0	0	0	6
Idaho:											
Boise	2	0	0	0	0	0	0	0	0	0	4
Colorado:											
Denver	11	4	2	1	0	10	0	0	1	0	115
Pueblo	2	0	0	0	0	0	0	0	0	0	13
New Mexico:											
Albuquerque	1	0	0	0	0	2	0	0	0	9	15
Utah:											
Salt Lake City	3	4	2	3	0	1	0	1	0	2	32
Nevada:											
Reno	0	0	0	0	0	0	0	0	0	0	6
PACIFIC											
Washington:											
Seattle	10	3	2	1			1	0		8	
Spokane	8	6	4	0			0	0		0	
Tacoma	3	0	4	0	0	0	0	0	0	4	41
Oregon:											
Portland	7	3	8	25	0	5	1	0	0	1	113
Salem	0	0	0	0	0	0	0	0	0	0	
California:											
Los Angeles	27	40	4	0	0	38	1	3	1	38	349
Sacramento	2	13	2	0	0	2	0	0	0	0	31
San Francisco	16	12	1	1	0	19	0	0	0	5	173

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (Infantile paralysis)			
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths	
NEW ENGLAND										
Massachusetts:										
Boston	0	1	0	0	0	0	0	1	0	
MIDDLE ATLANTIC										
New York:										
Buffalo	0	1	0	0	0	0	0	0	0	
New York ¹	11	10	1	2	0	0	1	3	2	
New Jersey:										
Newark	3	0	2	0	0	0	0	0	0	
Trenton	1	0	0	0	0	0	0	0	0	
Pennsylvania:										
Philadelphia	0	0	1	0	0	0	0	0	0	
Pittsburgh	1	0	0	1	0	0	0	0	1	

¹ Typhus fever; 1 case at New York City.

City reports for week ended January 5, 1929—Continued

Division, State, and city	Meningococcus meningitis		Lethargic encephalitis		Pellagra		Poliomyelitis (infantile paralysis)		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases, estimated expectancy	Cases	Deaths
EAST NORTH CENTRAL									
Ohio:									
Cincinnati.....	1	0	0	0	0	0	0	0	0
Cleveland.....	2	1	1	1	0	0	0	0	0
Toledo.....	0	0	0	1	0	0	0	0	0
Indiana:									
Indianapolis.....	0	4	0	0	0	0	0	0	0
Illinois:									
Chicago.....	14	12	1	1	0	0	0	0	0
Michigan:									
Detroit.....	13	5	2	1	0	0	0	0	0
Wisconsin:									
Milwaukee.....	2	1	0	0	0	0	0	0	0
Racine.....	1	0	0	0	0	0	0	0	0
Superior.....	0	1	0	0	0	0	0	0	0
WEST NORTH CENTRAL									
Minnesota:									
Duluth.....	0	1	0	0	0	0	0	0	0
Minneapolis.....	1	1	1	1	0	0	0	0	0
St. Paul.....	0	0	0	1	0	0	0	0	0
Iowa:									
Sioux City.....	1	0	0	0	0	0	0	0	0
Missouri:									
Kansas City.....	6	4	0	1	0	0	0	0	0
St. Louis.....	8	5	0	0	0	0	0	0	0
North Dakota:									
Fargo.....	3	0	1	1	0	0	0	0	0
Nebraska:									
Omaha.....	1	0	0	0	0	0	0	0	0
SOUTH ATLANTIC									
Maryland:									
Baltimore.....	3	1	0	0	0	0	0	0	0
District of Columbia:									
Washington.....	1	1	0	0	0	0	0	0	0
Georgia:									
Savannah.....	0	0	0	0	1	1	0	0	0
Florida:									
Tampa.....	0	0	0	0	1	0	0	0	0
EAST SOUTH CENTRAL									
Tennessee:									
Memphis.....	1	1	0	0	0	0	0	0	0
Alabama:									
Montgomery.....	0	0	0	0	1	0	0	0	0
WEST SOUTH CENTRAL									
Arkansas:									
Little Rock.....	0	0	0	0	0	1	0	0	0
Louisiana:									
New Orleans.....	0	0	0	0	2	3	0	0	0
Shreveport.....	2	0	0	0	0	0	0	0	0
Texas:									
Houston.....	0	0	0	0	0	1	0	0	0
San Antonio.....	1	0	0	0	0	0	0	0	0
MOUNTAIN									
Colorado:									
Denver.....	1	1	0	0	0	0	0	0	0
Utah:									
Salt Lake City.....	2	1	0	0	0	0	0	0	0
PACIFIC									
California:									
Los Angeles.....	2	2	0	0	0	0	0	0	1
Sacramento.....	2	0	0	0	0	0	0	0	0
San Francisco.....	4	3	0	0	0	0	0	0	0

The following table gives the rates per 100,000 population for 98 cities for the 5-week period ended January 5, 1929, compared with those for a like period ended January 7, 1928. The population figures used in computing the rates for the week of 1929 and corresponding week of 1928 are approximate estimates as of July 1, 1929 and 1928, respectively, authoritative figures for many of the cities not being available. The 98 cities reporting cases had estimated aggregate populations of approximately 31,570,000 in 1929 and 31,050,000 in 1928. The 91 cities reporting deaths had nearly 30,000,000 estimated population in 1929 and nearly 29,500,000 in 1928. The number of cities included in each group and the estimated aggregate populations are shown in a separate table below.

*Summary of weekly reports from cities, December 2, 1928, to January 5, 1929—
Annual rates per 100,000 population compared with rates for the corresponding period of 1927-28¹*

DIPHTHERIA CASE RATES

	Week ended—									
	Dec. 8, 1928	Dec. 10, 1927	Dec. 15, 1928	Dec. 17, 1927	Dec. 22, 1928	Dec. 24, 1927	Dec. 29, 1928	Dec. 31, 1927	Jan. 5, 1929	Jan. 7, 1928
98 cities.....	164	204	157	204	144	201	² 131	185	³ 148	⁴ 170
New England.....	209	216	216	200	159	193	170	165	163	149
Middle Atlantic.....	159	228	139	225	145	232	155	220	178	202
East North Central.....	190	227	209	247	166	212	⁵ 132	200	153	176
West North Central.....	148	129	148	129	138	123	119	125	161	96
South Atlantic.....	139	189	121	139	117	143	⁶ 101	128	⁷ 111	⁸ 160
East South Central.....	125	71	85	127	105	127	95	112	88	105
West South Central.....	256	215	248	215	188	339	172	261	⁹ 95	243
Mountain.....	35	143	18	161	71	117	18	63	70	71
Pacific.....	100	167	61	167	95	157	43	141	60	123

MEASLES CASE RATES

98 cities.....	146	225	181	247	176	284	² 160	321	³ 107	⁴ 510
New England.....	736	539	837	140	800	537	676	709	964	917
Middle Atlantic.....	46	199	91	205	68	250	77	330	80	468
East North Central.....	187	140	194	117	251	157	⁵ 217	159	230	265
West North Central.....	193	49	271	46	224	38	201	46	198	135
South Atlantic.....	53	525	84	604	49	794	⁶ 69	828	⁷ 115	⁸ 1,403
East South Central.....	15	365	15	527	20	710	15	396	14	2,118
West South Central.....	40	132	12	248	12	83	4	112	⁹ 29	203
Mountain.....	186	36	257	27	203	18	106	36	383	62
Pacific.....	43	178	64	238	49	256	84	282	40	384

SCARLET FEVER CASE RATES

98 cities.....	200	184	201	211	185	186	² 180	209	³ 195	⁴ 206
New England.....	237	321	223	326	241	281	308	346	296	340
Middle Atlantic.....	141	156	143	198	144	173	138	200	148	196
East North Central.....	260	216	290	243	234	212	⁵ 204	257	239	233
West North Central.....	263	206	251	204	240	202	261	192	258	203
South Atlantic.....	165	133	149	162	161	144	⁶ 129	148	⁷ 155	⁸ 158
East South Central.....	259	81	209	142	200	117	259	117	197	63
West South Central.....	216	116	172	170	100	91	160	124	⁹ 133	101
Mountain.....	80	305	62	242	27	170	27	233	113	195
Pacific.....	197	151	181	154	197	191	151	125	185	184

¹ The figures given in this table are rates per 100,000 population, annual basis, and not the number of cases reported. Populations used are estimated as of July 1, 1929, 1928 and 1927, respectively.

² Cincinnati, Ohio and Greenville, S. C., not included.

³ Brunswick, Ga., and Dallas, Tex., not included.

⁴ Atlanta, Ga., not included.

⁵ Cincinnati, Ohio, not included.

⁶ Greenville, S. C., not included.

⁷ Brunswick, Ga., not included.

⁸ Dallas, Tex., not included.

Summary of weekly reports from cities, December 2, 1928, to January 5, 1929—
Annual rates per 100,000 population compared with rates for the corresponding
period of 1927-28—Continued

SMALLPOX CASE RATES

	Week ended—									
	Dec. 8, 1928	Dec. 10, 1927	Dec. 15, 1928	Dec. 17, 1927	Dec. 22, 1928	Dec. 24, 1927	Dec. 29, 1928	Dec. 31, 1927	Jan. 5, 1929	Jan. 7, 1928
98 cities.....	4	13	8	19	8	16	24	15	23	47
New England.....	2	0	0	0	2	0	2	0	0	0
Middle Atlantic.....	0	0	0	0	0	0	0	0	1	0
East North Central.....	10	4	16	17	4	12	13	12	6	9
West North Central.....	2	75	0	115	6	77	10	79	2	106
South Atlantic.....	0	7	2	5	0	20	2	4	7	13
East South Central.....	20	5	5	5	0	20	5	10	7	7
West South Central.....	4	8	24	0	40	12	12	4	5	16
Mountain.....	0	99	44	117	44	99	35	143	35	106
Pacific.....	8	39	20	31	56	26	15	29	5	26

TYPHOID FEVER CASE RATES

98 cities.....	9	11	5	8	4	11	25	7	24	45
New England.....	5	12	7	0	2	9	2	14	5	7
Middle Atlantic.....	7	8	4	8	4	10	4	4	2	3
East North Central.....	7	9	1	3	1	8	4	5	3	3
West North Central.....	4	14	4	6	2	8	6	10	0	2
South Atlantic.....	7	9	5	9	7	16	5	13	7	17
East South Central.....	20	30	15	35	5	25	5	10	0	28
West South Central.....	48	21	16	17	8	17	8	21	5	0
Mountain.....	0	9	9	18	9	9	9	18	9	9
Pacific.....	5	13	8	16	10	10	8	0	7	5

INFLUENZA DEATH RATES

91 cities.....	48	12	76	14	112	17	173	19	230	20
New England.....	9	9	9	12	14	5	14	5	48	16
Middle Atlantic.....	17	7	27	9	66	11	129	14	165	13
East North Central.....	18	9	44	11	124	13	206	10	238	10
West North Central.....	43	6	116	6	147	10	169	8	240	6
South Atlantic.....	51	16	95	14	123	20	262	22	345	23
East South Central.....	58	58	68	64	58	48	193	58	970	130
West South Central.....	53	47	94	55	209	72	373	81	555	83
Mountain.....	513	9	734	9	593	27	265	72	218	53
Pacific.....	294	3	317	17	213	24	182	31	134	24

PNEUMONIA DEATH RATES

91 cities.....	156	110	212	118	241	135	303	156	381	175
New England.....	80	51	108	102	159	121	159	146	201	103
Middle Atlantic.....	149	119	190	117	246	126	293	158	395	186
East North Central.....	135	97	171	97	255	105	385	135	466	140
West North Central.....	129	99	212	91	295	97	242	108	216	187
South Atlantic.....	165	135	237	161	226	182	333	184	353	238
East South Central.....	282	154	188	149	188	213	246	191	533	268
West South Central.....	176	102	181	191	250	229	402	306	693	241
Mountain.....	336	215	628	134	398	242	363	197	174	195
Pacific.....	294	110	223	131	169	166	169	138	148	175

¹ Cincinnati, Ohio, and Greenville, S. C., not included.

² Brunswick, Ga., and Dallas, Tex., not included.

³ Atlanta, Ga., not included.

⁴ Cincinnati, Ohio, not included.

⁵ Greenville, S. C., not included.

⁶ Brunswick, Ga., not included.

⁷ Dallas, Tex., not included.

Number of cities included in summary of weekly reports, and aggregate population of cities of each group, approximated as of July 1, 1929 and 1928, respectively

Group of cities	Number of cities reporting cases	Number of cities reporting deaths	Aggregate population of cities reporting cases		Aggregate population of cities reporting deaths	
			1929	1928	1929	1928
Total.....	98	91	31,568,400	31,082,700	29,995,100	29,498,000
New England.....	12	12	2,305,100	2,273,900	2,305,100	2,273,900
Middle Atlantic.....	10	10	10,809,700	10,702,200	10,809,700	10,702,200
East North Central.....	16	16	8,181,900	8,001,300	8,181,900	8,001,300
West North Central.....	12	9	2,712,100	2,673,300	1,736,900	1,708,100
South Atlantic.....	19	19	2,783,200	2,732,900	2,783,200	2,732,900
East South Central.....	6	5	767,900	745,500	704,200	682,400
West South Central.....	8	7	1,319,100	1,289,900	1,283,000	1,256,400
Mountain.....	9	9	598,800	590,200	598,800	590,200
Pacific.....	6	4	2,090,600	2,043,500	1,590,300	1,551,200

FOREIGN AND INSULAR

THE FAR EAST

Report for the week ended December 29, 1928.—The following report for the week ended December 29, 1928, was transmitted by the eastern bureau of the health section of the secretariat of the League of Nations, located at Singapore, to the headquarters at Geneva.

Plague, cholera, and smallpox were reported at the following ports:

PLAGUE

India.—Bombay—plague-infected rats.
Siam.—Bangkok—death on vessel from Singapore, arriving at Bangkok.

CHOLERA

India.—Tuticorin, Negapatam.
Siam.—Bangkok.
Indo-China.—Saigon.

SMALLPOX

India.—Bombay, Negapatam.
French India.—Pondicherry.
Indo-China.—Saigon.
Dutch East Indies.—Samarinda.
China.—Hong Kong, Shanghai.

CANADA

Provinces—Communicable diseases—Week ended December 29, 1928.—The Department of Pensions and National Health reports cases of certain communicable diseases from six Provinces of Canada for the week ended December 29, 1928, as follows:

Disease	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Total
Cerebrospinal fever.....				1			1
Influenza.....				4,125	17	42	4,184
Poliomyelitis.....			1	1			2
Smallpox.....			8	1	2	6	17
Typhoid fever.....	1	2	4	8		1	16

Nova Scotia—Smallpox outbreak, January 14, 1929.—Twelve to fifteen cases of smallpox were reported, January 14, 1929, near Shubenacadie, Nova Scotia, Canada, in a district which supplies milk to Halifax. The type of the disease was said to be virulent. Quarantines have been established at several houses, and the milk supply from a number of dairies was stopped by the authorities.

Ontario Province—Influenza—Week ended December 29, 1928.—During the week ended December 29, 1928, 4,125 cases of influenza were reported in the Province of Ontario, Canada. There was no unusual virulence, and complications were few.

Quebec Province—Communicable diseases—Week ended December 29, 1928.—The Bureau of Health of the Province of Quebec reports cases of certain communicable diseases for the week ended December 29, 1928, as follows:

Disease	Cases	Disease	Cases
Chicken pox.....	22	Scarlet fever.....	58
Diphtheria.....	51	Smallpox.....	8
German measles.....	1	Tuberculosis.....	66
Influenza.....	529	Typhoid fever.....	4
Measles.....	20	Whooping cough.....	11
Poliomyelitis.....	1		

CHOLERA, FLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

PLAGUE

[C indicates cases; D, deaths; P, present]

Place	Week ended—										
	November, 1928			December, 1928			Jan. 5, 1929				
	Oct. 27, 1928	3	10	17	24	1	8	15	22	29	
Algeria (see also table below):											
Algiers.....											
Oran.....											
Philippeville.....											
Arabia: Aden.....											
Argentina: 1											
Avelaneda.....											
Buenos Aires 1											
Catamarca Province: Retiro											
Cordoba Province—											
Canada Honda.....											
Laborde.....											
Entre Rios.....											
Juluy Province—Perico.....											
Loreto.....											
Rosario.....											
Santa Fe.....											
Santiago del Estero.....											
Guardi.....											
Tucuman Province—El Mollar.....											
Azores: St. Michaels Island.....											
Belgian Congo:											
Djugu.....											
Leona.....											
Bolivia: Valle Grande.....											
Brazil: Bahia.....											
British East Africa (see also table below):											
Mombasa.....											

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

PLAGUE—Continued

[C indicates cases; D, deaths; P, present]

[illegible]

[illegible]

China:														
Amoy.....	P	3	P	P	P	P	P	P	P	P	P	P	P	P
Canton.....	P	30	14	11	19	13	7	6	22	31	17	33	61	9
Chefoo.....	P	23	19	5	16	8	6		6	9	8	25	16	7
Foochow.....	P	6							1					
Hong Kong.....	P	27	31	11					3	1	1	2		
Manchuria—	P	35	48	21	3	2	1	1	1					
Changchun.....	P	20		12	3									
Fushun.....	P	3		1	1	2								
Harbin.....	P	11												
Kwantung—	P	35	48	21	3	2	1	1	1					
Dairen.....	P	20		12	3									
Port Arthur.....	P	3		1	1									
Mukden.....	P	3	6			2								
Penshu.....	P	1	1											
Shanghai.....	P	1	1											
South Manchuria Railway Zone.	P	6												
Foreigners only.....	P	11	7	2	2	2	3	1	3	4	4	1	1	
Including natives.....	P	19	11	10	2		6	3	6	11	6	11	6	
Tientsin.....	P	9	14	1		1	4	4	2					
Chosen (see table below).	P													
Curacao (alastim).	P													
Dutch East Indies:	P													
Batikpapan.....	P			2										
Belawan Doll.....	P			7										
Borneo—	P			2										
Pontianak.....	P		11	4	9	10	1	2	1	1	2	1	3	
Samarinda.....	P		3	1	3	2	3	1	1	1	1	1	1	
Celebes—Makassar.....	P				5	4	2	1						
Java—	P				2									
Batavia and West Java.....	P			2	6	1	6	1	1	1				
East Java and Madura.....	P		2	3	6	5	5	1						
Surabaya.....	P			3	1	6	1	1						
Sumatra—	P				6	4	2	1						
Medan.....	P				1									
Palimbang.....	P	10	4	5	9	7	14	1	3	1	2			
Palmang.....	P	5		2	8	4	1	1	1		1			

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

SMALLPOX—Continued

(C indicates cases; D, deaths; P, present)

Place	May 6- June 2, 1928	July 1-28, 1928	July 29- Aug. 30, 1928	Aug. 31- Sept. 7, 1928	Sept. 8- Oct. 14, 1928	Week ended—												
						November, 1928					December, 1928					January, 1929		
						Oct. 27, 1928	3	10	17	24	1	8	15	22	29		5	12
Ecuador (see table below).	1																	
Egypt.....	1																	
Beheira Province																		
Suez.....			1										1					
France (see table below).																		
Great Britain:	1, 199	681	492	430	514	148	122	149	162	199	189	135	176	201	131			
England and Wales.....	2	1																
Birmingham.....	17	10	2	1	1							1						
Bradford.....	10	2	2															
Bristol.....	10																	
Cardiff.....	2																	
Castleford.....	18	14	10	5	8		5	1			4	1	3	3	2			
Hull.....	1	24	15	13	7	1		1	1	1								
Leeds.....	8	1	1	6										1	1			
London.....	25	96	19	8	12	4	4	4	9	5	4	4	1	1	6	10		
Manchester.....	5	1		3														
Newcastle-on-Tyne.....	12	6	2	15	5	1		1	2	2	2	1	1	3				
Plymouth.....	20	3	6	10	3	2		6	1	2	2	1	6	1	1			
Sheffield.....	4	2	2	1	4													
Stoke-on-Trent.....	24	14	5	8														
Weymouth.....			1															
Scotland—																		
Arbroath.....			4	3	3													
Dundee.....				1								1						
Greece (see table below).																		
Hedjaz.....	6	14	18	1														
India.....	2	1	6															
Bombay.....	21,480	13,407	9,981	4,553	2,792	617	727	824	873	274								
Calcutta.....	5,046	3,700	2,758	1,116	696	157	191	214	965	291								
	136	71	67	28	14	5	2	1	1		2	2	2	2	1			
	78	46	33	21	13	7	1	1	1	3	2	4	4	2				
	130	61	52	22	13	4												
	101	50	35	17	17													

Karachi.....	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
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CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

SMALLPOX—Continued

[C Indicates cases; D, deaths; F, present]

Place	Week ended—															
	May 6– June 2, 1928	June 3–30, 1928	July 1–28, 1928	July 29– Aug. 25, 1928	Aug. 26– Sept. 22, 1928	Sept. 23– Oct. 20, 1928	November, 1928					December, 1928			January, 1929	
							Oct. 27, 1928	3	10	17	24	1	8	15		22
Mexico (see also table below)—Continued.																
Juarez.....						1										
Mazatlan.....	3	2	3	2	1	1										
Mexico City and surrounding territory.....	2		3	1	1				5					2	3	
Reynosa.....		1														
Saltillo.....																
San Luis Potosí.....	2	2			1	2										
Tampico.....					1											
Torreón.....						1			1							
Tulancingo.....																
Tuxtepec.....						1										
Morocco (see table below).																
Nigeria (see also table below):																
Lagos.....		1								1						
Southern Provinces.....		51														
Zaria.....		12				1										
Poland.....	1	3	2													
Portugal (see also table below):																
Lisbon.....	7	7	8	1	1											
Senegal (see also table below):																
Dakar.....	29	8														
Fatick.....	7	3	1													
Kaolack.....	8	1				3										
Ndiaye.....	1			2	1	1										
Saint-Louis.....																
Tambacounda.....																
Ziguinchor.....																
Siam.....																
Bangkok.....																
Straits Settlements: Singapore.....																
Sudan (Anglo-Egyptian).....	168	205	144	252	152	89	2									
Khartoum.....	20	37	35	34	34	19										
Sudan (French) (see table below).																
Syria (see table below).																
Taiwan: Keelung.....																
Taiwan: Tamsui.....																
Tunisia: Tunis.....	3	1	8	5	1											

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

TYPHUS FEVER

(C indicates cases; D, deaths; P, present)

[illegible]

CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER—Continued

TYPHUS FEVER—Continued

[C indicates cases; D, deaths; P, present]

Place	Week ended—									
	November, 1928					December, 1928				
	Oct. 27, 1928	3	10	17	24	1	8	15	22	29
Union of South Africa:										
Cape Province.....	C									
East London.....	D									
Natal.....	C									
Orange Free State.....	C									
Transvaal.....	C									
Union of Socialist Soviet Republics (see table below).	C									
Yugoslavia (see table below).	C									

Place	Jan- uary- March, 1928	April- June, 1928	July- Sep- tem- ber, 1928	Octo- ber, 1928	No- vem- ber, 1928	De- cem- ber, 1928
	Chosen.....	806	633	5		
	Chemulpo.....	88	75	2		
Geisan.....	2	2		1		
Seoul.....	1					
D 1.....	10	46	8	3		
D 1.....	1	6	3			
Czechoslovakia.....	25					
Greece: Athens.....	4	33	6	1	4	
D 5.....	5		1			
Japan.....	21					
Latvia.....	27	102	7			
Lithuania.....	223	102	27	4	4	11
D 22.....	22	7	6			3

Place	Jan- uary- March, 1928	April- June, 1928	July- Sep- tem- ber, 1928	Octo- ber, 1928	No- vem- ber, 1928	De- cem- ber, 1928
	Mexico (see also table above)	46				
	Peru:					
Arequipa.....	D					
La Oroya.....	D	2	1			
Turkey.....	C	P	1			
D 1.....	D	17	15	16	4	2
D 2.....	D	1	2	2	1	
Union of Socialist Soviet Republics:						
Railways, etc.....	C					
Transcaucasus, Siberia, and cen- tral Asia.....	C	199				
Ukraine.....	C	17				
Other territories in Europe.....	C	1,476				
C 5,167.....	C	5,167				
Yugoslavia.....	C	34	45	18	1	17
D 3.....	D	3	3	5		1

YELLOW FEVER

[C Indicates cases; D, deaths; P, present]

Place	Week ended—												
	May 6- June 2, 1928	June 3-30, 1928	July 1-28, 1928	July 29-Aug. 25, 1928	Aug 26- Sept. 22, 1928	Sept. 23-Oct. 20, 1928	November, 1928						January, 1929
							Oct. 29, 1928	3	10	17	24	1	
Belgian Congo: Matadi.....	C	2											
Brazil:													
Aracaju.....	D	2											
Bahia.....	D		4		1		1						
Para.....	D												
Pernambuco (Recife).....	D												
Rio de Janeiro.....	C	2	48	40	9	6	1	1					2
Sao Felix.....	D	2	22	26	8	4	1						
Dahomey:													
Grand Popo.....	C		3										
Ouidah Military Camp.....	D	2											
Gambia: Bathurst.....	D												
Gold Coast.....	D												
Ivory Coast.....	C	2						2	1	2	1	1	
A.....	D												
Abidjan.....	D		1										
Perkes-Sedougou.....	D	1											
On vessel:	D		1										
S. S. Bernini, at Santos, Brazil.....	C			1									
S. S. Victoria, at Manaus from Para, Brazil.....	D				4								1
	D			1	1								1

X